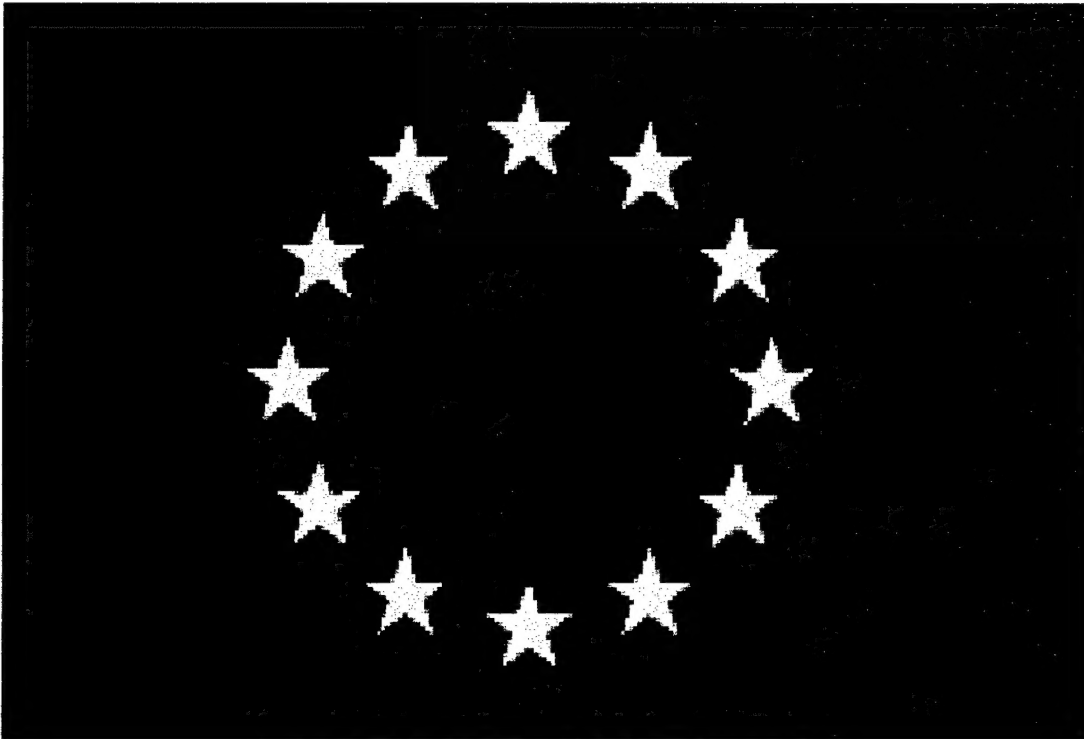


# **STATUS OF CONSTRUCTION IN THE EUROPEAN UNION**



**By: Isabelle E. Detter**  
**Summer (A) 2003**

**DISTRIBUTION STATEMENT A**  
Approved for Public Release  
Distribution Unlimited

20030714 159

# **STATUS OF CONSTRUCTION IN THE EUROPEAN UNION**

**By**

**Isabelle E. Detter  
Lieutenant  
Civil Engineer Corps  
United States Navy**

**A Report Presented to the Graduate Committee of the Department of Civil  
Engineering in Partial Fulfillment of the Requirements for the Degree of  
Masters of Engineering**

**University of Florida**

**Summer 2003**

## **ABSTRACT**

The creation of the European Union (EU) has been a work in progress for several decades. In fact, it is still in the process of being refined both politically and financially. Therefore, the status of construction in the EU is volatile, much like the state of the EU itself. This report merely attempts to take a “snapshot” of the status of construction at this particular point in time. Some speculations are made as to the probability of the success of the industry in the near future. However, long term predictions are not made.

The construction industry within the European theatre was greatly impacted by the creation of the European Union. This paper will address the need for standardization of: (1) contract form, (2) construction products (materials); and (3) technical specifications within the EU. It will also detail some of the measures that are being developed to implement these requirements. The integration of the EU workforce is described in an effort to define the impact of the single market economy on the construction industry. A brief history of the European Union is provided to give background on the political and economic climate of the region.

## **TABLE OF CONTENTS**

### **1. CHAPTER ONE - Introduction of the European Union**

#### **1.1. History**

##### **1.1.1. European Union (EU)**

###### **1.1.1.1. Pillar One**

###### **1.1.1.2. Pillar Two**

###### **1.1.1.3. Pillar Three**

##### **1.1.2. Treaties**

##### **1.1.3. Member States and Expansion**

#### **1.2. Government**

#### **1.3. Monetary Union**

##### **1.3.1. Court of Auditors**

##### **1.3.2. European Central Bank (ECB)**

##### **1.3.3. European Investment Bank (EIB)**

#### **1.4. Current Status of the Union**

##### **1.4.1. EU Convention**

##### **1.4.2. Reform Proposals**

##### **1.4.3. NATO Expands**

##### **1.4.4. Politics**

##### **1.4.5. Economy**

##### **1.4.6. Battle Over Budget Pact**

##### **1.4.7. Corporate Difficulties**

##### **1.4.8. Statistics**

### **2. CHAPTER TWO - Summary of the European Construction Industry**

#### **2.1. Government of the Construction Sector Industry**

#### **2.2. Sector in the Economy**

#### **2.3. Construction as a Percentage of GDP**



- 2.4. Physical Output of the European Construction Industry
- 2.5. Employment in the European Construction Industry
- 2.6. European Union (Powerhouse of the European Construction Industry)
- 2.7. General State of Construction
  - 2.7.1. Structure of the Construction Sector Within Europe
    - 2.7.1.1. Small and Medium Enterprises (SMEs)
    - 2.7.1.2. Sub-Contracting Relationships
  - 2.7.2. Competitiveness Improvement Initiatives
    - 2.7.2.1. To Develop a Coherent Quality Policy for the Sector
    - 2.7.2.2. To Improve the Regulator Environment
    - 2.7.2.3. To Improve Provision of Education and Training
    - 2.7.2.4. To Reorient and Reinforce Research and Development
  - 2.7.3. Markets
    - 2.7.3.1. Public Investment in Infrastructure
    - 2.7.3.2. International Market
    - 2.7.3.3. Financial Aspects
    - 2.7.3.4. Exports
  - 2.7.4. The Likely Affects of the Conflict in Iraq

### **3. CHAPTER THREE – Standardization**

- 3.1. European Policy Principles for International Standardization
  - 3.1.1. World Trade Organization (WTO) International Standards
  - 3.1.2. Efficiency of International Standards Bodies
- 3.2. The European Committee for Standardization
- 3.3. A European Standard Form of Contract
  - 3.3.1. Safety
  - 3.3.2. Timeliness
  - 3.3.3. Quality
  - 3.3.4. Innovation
  - 3.3.5. Where Does This Effort Currently Stand Within the EU?
    - 3.3.5.1. Different Legal Systems in Member States

- 3.3.5.2. Domestic Projects
    - 3.3.5.3. Counter-Productive to the Extension of the Single Market?
    - 3.3.5.4. Advantage for Public Procurement
    - 3.3.5.5. How Would These Principles Interact With Existing Contracts and the Legal Systems of the Member States in Practice?
- 3.4. Construction Products (Materials)
  - 3.4.1. Construction Products Directive (Appendix B)
  - 3.4.2. Qualification of Construction Materials
- 3.5. Technical Specifications
  - 3.5.1. Structural Eurocodes
  - 3.5.2. Guidance Papers
- 3.6. Two Entities Exist That Help the EU Regulate These Guidelines
  - 3.6.1. European International Contractors (EIC)
  - 3.6.2. European Construction Industry Federation (FIEC)
  - 3.6.3. How Do These Organizations Cooperate?
- 3.7. Information Technology
  - 3.7.1. E-Tenders and E-Project Management

#### **4. CHAPTER FOUR - Work Force Integration**

- 4.1. Human Resources
- 4.2. Challenges

#### **5. CHAPTER FIVE – Conclusions**

- 5.1. Future of the EU
- 5.2. Construction in the EU
- 5.3. Competitiveness in Construction
- 5.4. Standardization
- 5.5. Workforce Integration
- 5.6. Unique Concerns
- 5.7. Summary

## **6. APPENDIX**

6.1. A - Background on the European Union

6.2. B - Construction Products Directive (CPD)

## **7. BIBLIOGRAPHY**

7.1. Books

7.2. World Wide Web

## **8. GLOSSARY OF ABBREVIATIONS**

## **1. Introduction of the European Union (Summary plus Appendix A)**

The construction industry within the European theatre was greatly impacted by the creation of the European Union (EU). This paper will address the need for standardization of: (1) contract form, (2) construction products (materials); and (3) technical specifications within the EU. It will also detail some of the measures that are being developed to implement these requirements.

The following paragraphs will provide a brief overview of the history, government, and monetary union of Western Europe. An in-depth report on this information is provided in the Appendix A.

### **1.1. History**

The development of the European Union has been underway for decades; therefore, the fundamentals of the Union have been forged through a series of treaties that continue still today. The process began on 09 May 1950 with the Schumann Plan.

Until the end of World War II, numerous attempts had been made at forcing the unification of Europe. Nations strongly opposed due to fears that such a union would infringe on their powers. Then some efforts were made to unite Europe using mutual cooperation with *international* or *intergovernmental organizations* that depended on the voluntary cooperation of their members. However, the organizations lacked powers to enforce laws and regulations and therefore were ineffective as well. Finally, at the end of World War II the development of a *supranational organization*, know as the Schumann Plan, began. A supranational organization requires its members to surrender at least a portion of their control over policy areas and can compel compliance with their mandates. Postwar proposals for a European supranational organization had both political and economic motives. The political

motive was based on the belief that only a supranational organization could eliminate the threat of war between European countries.

### **1.1.1. European Union (EU)**

The "European Union" that exists today is a three pillar union created through a series of treaties. The three pillar system is defined as follows.

**1.1.1.1. Pillar One** incorporates the three founding treaties now forming the "European Community" and sets out the institutional requirements for Economic and Monetary Union (EMU). It also provides for expanded Community action in certain areas such as the environment, research, education, and training.

**1.1.1.2. Pillar Two** established the Common Foreign and Security Policy (CFSP), which makes it possible for the Union to take joint action in foreign and security affairs.

**1.1.1.3. Pillar Three** created the Justice and Home Affairs (JHA) policy, dealing with asylum, immigration, judicial cooperation in civil and criminal matters, and customs and police cooperation against terrorism, drug trafficking, and fraud.

### **1.1.2. Treaties**

The development of the EU was done through the following series of treaties.

<b>Treaty or Organization</b>	<b>Date</b>	<b>Members</b>	<b>Results</b>
European Coal and Steel Community (ECSC)	18 APR 1951	France, Belgium, Fed Republic of Germany, Italy, Luxembourg, and the Netherlands	Set up the ECSC High Authority
European Atomic Energy Community (Euratom)	25 MAR 1957	Same six countries as above	Development of peaceful uses of atomic energy

European Economic Community (EEC, often referred to as the Common Market).	25 MAR 1957	Same six countries as above	Elimination of import duties, quotas on trade bet member nations, instituted a common external tariff.
European Free Trade Association (EFTA).	1958	United Kingdom, Norway, Sweden, Denmark, Switzerland, Austria, and Portugal	Elimination of tariffs on industrial products among the member nations.
European Community	1967	France, Belgium, Fed Republic of Germany, Italy, Luxembourg, and the Netherlands	EEC, the ECSC, and Euratom fully merged
Single European Act (SEA),	FEB 1986	Original Six (now with a united Germany) plus United Kingdom, Ireland, Denmark, and Greece	Package of amendments and additions to the existing EC treaties
Treaty on European Union (often called the Maastricht Treaty)	DEC 1991 - NOV 1993	Existing 10 members plus Spain and Portugal	Created 3 Pillar Union that exists today. Economic and Monetary Union (EMU), Common Foreign and Security Policy (CFSP), and expanded cooperation in judicial and policing matters.
Amsterdam Treaty	MAR 1996	Existing 12 members plus Austria, Finland, and Sweden	Created jobs, protected the environment, improved public health, and safeguarded consumer rights.
Treaty of Nice	DEC 2000	Same as in Amsterdam	Addressed institutional questions
Intergovernmental conference (IGC)	DEC 2004	All 15 members	Future conferences scheduled for continual revisions.

### **1.1.3. Member States and Expansion**

During the long process of the development of the European Union several attempts at expansion of the union were made. Some were successful, some unsuccessful, and some are still currently in the process of being ratified. The current member states are as follows: Belgium, Germany, France, Italy, Luxembourg, Netherlands (1958); Denmark, Ireland, United Kingdom (1973); Greece (1981); Spain, Portugal (1986); Austria, Finland, Sweden (1995).

The EU in 2002 completed membership negotiations with Poland, Hungary, the Czech Republic, Slovakia, Slovenia, Estonia, Latvia, Lithuania, Cyprus, and Malta in 2002. The agreement capped a nearly decade-long process of political and economic reform in the 10 countries. The EU determined that all 10 countries had established democratic governments that respect human rights and the rule of law. The 10 countries met a series of economic requirements that included limiting government subsidies to industry and opening their economies to foreign trade and investment. In December 2002, at the EU summit in Copenhagen, Denmark, it was decided that they had made sufficient progress to be ready for membership by 2004. They agreed on financial terms for entry of 10 Eastern European countries into the EU. They also told Turkey that it can open its membership negotiations without further delay if it meets membership criteria in the December 2004 review. Under the agreement, the new members would become eligible for EU agricultural subsidies over a 10-year period. The EU also agreed to provide the 10 countries with \$23 billion in development aid for roads, railroads, and other public works projects. The aid was crucial to most of the 10 countries, where individual incomes are less than half the average income in the 15 EU member countries. The expansion, which must be ratified by the parliaments of all EU member nations and the 10 candidate nations, would be the largest in the history of the EU.

## **1.2. Government**

Unlike the United States, the EU is founded on international treaties among sovereign nations rather than a constitution. The power to enact laws that are directly binding on all EU citizens throughout the EU territory also distinguishes the Union from international organizations. This governing system differs from all previous national and international models.

The European Union is governed by five institutions: European Commission, Council of the European Union, European Parliament, European Court of Justice, and European Court of Auditors. In addition, the heads of state and government and the Commission president meet at least twice a year in European Council summits to provide overall strategy and political direction. The European Central Bank is responsible for monetary policy and managing the euro in the Economic and Monetary Union. In addition, there are many smaller bodies in the EU, such as the Economic and Social Committee, and the Committee of the Regions.

## **1.3 Monetary Union**

The process of developing a European Monetary Union (EMU) consisted of three phases. This process was launched in 1990 as EU member states prepared for the 1992 single market. Aimed at boosting cross-border business activity, the first stage of EMU lifted restrictions on movements of capital across internal EU borders (July 1, 1990). Stage two, which began in January 1994, set up the European Monetary Institute (EMI) in Frankfurt to pave the way for the European Central Bank (ECB) in the same location. The introduction of the euro began the third stage and the final transition to full Economic and Monetary Union (EMU),

One of the primary goals of a monetary union within Europe (EMU) is to establish one common currency for all of Europe to allow for easier trade and economic competitiveness within the world market. The EU's attempts to establish a single European currency, as set out in the Maastricht Treaty, were controversial from the start. For instance, some EU countries, including the United Kingdom, worried that a



shared European currency would threaten their national identity and governmental authority. Despite their concerns, many of the EU's member countries struggled to meet the economic requirements for participating in a shared currency. However, the EU officially agreed in May 1998 to adopt a single European currency "the EURO" for 11 of the 15 member countries beginning on January 1, 1999. The 12<sup>th</sup> member state, Greece, adopted the Euro in 2001. The countries refusing to implement the common currency "Euro" were the United Kingdom, Denmark and Sweden. The hard currency was first issued on 01 January 2002. This single currency agreement also created the European Central Bank (ECB) to oversee the new currency and to take charge of the monetary policies of the EU.



The economic success of EMU depends on whether the euro is accepted in the international markets as a stable and strong currency and the extent to which it leads to a greater convergence of national economies and greater mobility of production, goods, and services within the EU. The Euro has been relatively close to the value of the American dollar with its current value being \$0.90. The following are descriptions of the governing body with respect to finances.

### **1.3.1 Court of Auditors**

The Court of Auditors is made up of 15 members, one from each EU member state. The court oversees the finances of the EU and ensures that all financial transactions are carried out according to the EU budget and laws. The court issues a yearly report to the Council of the European Union and the European Parliament detailing its findings.

### **1.3.2. European Central Bank (ECB)**

The European Central Bank (ECB) began operations in 1998. It is overseen by a six-member executive board that is chosen by agreement of the EU member governments and includes the ECB president and vice president. The ECB has exclusive authority for EU monetary policy, including such things as setting

interest rates and regulating the money supply. In addition, the ECB played and continues to play a major role in overseeing the inauguration and consolidation of the euro as the single EU currency. Its authority over monetary policy and its independence from other EU institutions make the ECB a very powerful body. There are misgivings that the ECB has been given too much independence, leading to a debate over whether it should be subject to political direction.

### **1.3.3. European Investment Bank (EIB)**

The European Investment Bank (EIB) was established in 1957 under the Rome treaty that created the European Economic Community (EEC). Its primary focus is on regional development, employment, and environmental modernization. The member states contribute to its capital, but it raises most of its funds on international markets. Some 8 percent of its budget goes to projects outside the EU. The bank only offers loans, not grants, and its contribution must be matched by an equivalent outlay from other sources. The EIB is an autonomous body able to make its own operational decisions free of political direction, within the general legal framework of the EU. It has been one of the most successful EU bodies. Since 1993 its annual lending volume has been greater than that of the International Bank for Reconstruction and Development (the World Bank).

## **1.4. Current Status of the European Union**

Economic growth remained sluggish in Europe throughout 2002. Unemployment edged higher, and several EU governments violated the budget deficit rules for countries using the euro.

### **1.4.1. EU Convention**

The task of governing an EU of 25 or more members preoccupied the group's leaders. They worried that future leaders would find it difficult to reach decisions on important economic and political issues without major changes to the governing procedures. A convention of senior EU political figures, who were

appointed in 2001, met through much of 2002 to draft proposals for reform. The reforms included proposals for either a written constitution or a preamble to the EU's several hundred pages of governing treaties. The group suggested that a constitution would set out the guiding principles in clear and inspiring language, similar to the U.S. Constitution.

#### **1.4.2. Reform Proposals:**

Other reform proposals included making decisions by a **majority vote**, rather than a unanimous one; strengthening links between the EU and national parliaments; and establishing a **procedure for countries to withdraw from the EU**. The convention was to revise its proposals during 2003, and EU governments were to agree to reforms in 2004, when the new members join.

#### **1.4.3. NATO Expands (North Atlantic Treaty Organization)**

The military alliance also agreed to admit new members from Eastern Europe, a historic move that paralleled the EU's enlargement. At a summit meeting in Prague on Nov. 21 and 22, 2002, the leaders of the 19 existing NATO members agreed to start accession talks with 7 countries--Bulgaria, Romania, Slovakia, Slovenia, Estonia, Latvia, and Lithuania. The latter three, the so-called Baltic nations, were part of the Soviet Union before declaring their independence in 1990. The other four nations were former members of the Warsaw Pact, the Cold War alliance that grouped the Soviet Union and its Eastern European satellites.

NATO leaders expected the accession talks to be completed in 2003 and the countries to join the alliance in 2004. The expansion would be the alliance's largest since it was founded in 1949. New members were last admitted in 1999, when NATO expanded into Poland, Hungary, and the Czech Republic.

NATO leaders also agreed to prepare the alliance for future missions, including possible operations outside of Europe. They agreed to create a NATO Response Force, which could quickly deploy land, sea, and air forces wherever needed.

European members of NATO also committed to improving their military capabilities, particularly in areas such as air and sea lift, to make their forces more deployable. Years of defense cutbacks had reduced the ability of European members to fight alongside U.S. forces in areas such as Afghanistan, raising concerns about the future cohesion of the alliance.

#### **1.4.4. Politics**

Politics shifted to the right in a number of European countries in 2002. In France, President Jacques Chirac, of the center-right Rally for the Republic, won reelection by an overwhelming margin in a May runoff against Jean-Marie Le Pen, leader of the extreme right-wing, anti-immigrant National Front. Voters in the Netherlands elected a coalition led by the center-right Christian Democratic Party and the List Pim Fortuyn, a new anti-immigrant party whose controversial leader was murdered one week before the May election. The government collapsed in October, however, because of divisions in List Pim Fortuyn. In Austria, the conservative People's Party of Chancellor Wolfgang Schuessel was reelected in November after its former coalition partner, the anti-immigrant Freedom Party, split into factions.

Bucking the trend to the right, the Social Democratic governments of Goran Persson in Sweden and Gerhard Schroeder of Germany won reelection in September.

#### **1.4.5. Economy**

Europe's economy slowed sharply for a second straight year in 2002, and Germany and Italy came close to recession in the second half of the year. The region continued to feel the effects of the worldwide economic slowdown, because sharp falls in stock prices, worries about the war in Iraq, and high tax rates in many countries depressed consumer confidence. Unlike the United States, which cut taxes in 2001 to spur growth, many European governments with big budget deficits were unable to take strong measures to stimulate their economies.

European Commission economists estimated that economic output in the 12 EU countries that use the euro would grow by only 0.8 percent in 2002, down from 1.5 percent in 2001. Unemployment was expected to rise to 8.2 percent from 8.0 percent. The three EU countries that do not use the euro--Denmark, Sweden, and the United Kingdom--were expected to grow at a somewhat faster rate of just over 1.5 percent in 2002.

#### **1.4.6. Battle Over Budget Pact:**

The weak economy posed a severe test for the EU's ability to manage the euro. Under the 1997 Stability and Growth Pact, countries using the euro agreed to try to keep their budgets balanced and deficits below 3 percent of gross domestic product (GDP--the total value of goods and services produced in a year). EU economists wanted to avoid a situation in which a budget problem in one country could harm the currency shared by the other countries. However, as Europe's economy slowed in 2002, tax revenues fell and budget deficits increased.

In July, the new Portuguese government of Prime Minister Jose Manuel Durao Barroso announced that the country's deficit was 4.1 percent of GDP in 2001, much higher than previously reported. The government announced a package of budget cutbacks while the EU Commission, which enforces EU budgetary rules, started legal procedures that could lead to fines being imposed on Portugal.

In September 2002, the French government ignored an EU Commission recommendation to cut its deficit and introduced a budget for 2003 with a deficit projected to be 2.9 percent of GDP. The response marked the first time that an EU member country had openly flouted the budgetary rules. In October 2002, Germany announced that its deficit would exceed the 3-percent limit because of slow growth. This was a huge embarrassment for Europe's largest economy, which had once enjoyed the continent's strongest currency. Germany had insisted on the deficit rule before the euro was launched because it mistrusted the ability of other EU countries to balance their budgets.

The difficulties prompted a vigorous debate about economic policy. France asked that the Stability Pact be modified. The president of the EU Commission, Romano Prodi, described the pact as "stupid" for being too inflexible. However, the European Central Bank, which sets interest rates for the euro countries, defended the budget rules as essential to maintaining confidence in the euro.

#### **1.4.7. Corporate Difficulties:**

European companies struggled with slow economic growth and with falling stock prices in 2002. Major European stock markets fell by an average 30 percent during the year, more than those in the United States. Several major companies faced severe difficulties.

#### **1.4.8. Statistics:**

The current statistics for the EU are as follows: **Capital:** Brussels, Strasbourg, Luxembourg; **Population:** 377 million; **Total Area:** 1,251,503.8 square miles; **Currency:** Euro € 1 = \$ 0.90 U.S. (APR 2003); **Languages:** French, English, German, Italian, Spanish, Portuguese, Greek, Dutch, Danish, Finnish, Swedish; **National holiday:** May 9, Schumann Day; **President of Commission:** Romano Prodi (Italy); **Rotating Council Presidency:** 6 months  
*January to June / July to December, 2003 Greece / Italy, 2004 Ireland / Netherlands;* **Commissioner for External Relations:** Christopher Patten (United Kingdom); **Commissioner for Trade:** Pascal Lamy (France);

**European Parliament:** 626 members elected for 5 years on 10-13 June 1999;  
**Distribution of seats:** Europe's People's Party (PPE) 233, Party of European Socialists (PSE) 180, European Liberal Dem. & Reform Party (ELDR) 50, Greens/European Free Alliance 48, European United Left/Nordic Green (GUE/MGL) 42, Union for a Europe of Nations (UEN) 30, Europe of Democracies & Diversities (EDD) 16, and Non-attached 27;

**GDP:** (in billions, at current prices) \$13,519.72; **GDP growth rate:** 1 %;  
**Unemployment rate:** 7.7%; **Inflation rate:** 2.3 %; **Exports:** \$ 1,366 billion  
(2002); **Imports:** \$ 1,425 billion (2002)

---

## **2. Summary of the European Construction Industry**

### **2.1. Government of the Construction Sector Industry**

The European construction industry is governed by the European Commission through a series of directives pertaining to the construction sector. A “**directive**” is a legal device used by the European Union to establish policy at European level. Directives have to be transported by Member States into their own legal system.

Since 1987 some 21 Directives, adopted on the basis of the New Approach and Global Approach, have progressively come into force. These Directives have the dual purpose of establishing a level playing field for free circulation of products in the Internal Market, and of guaranteeing a high level of protection.

### **2.2. Sector in the Economy**

Since a “Single Market Economy” is the goal of the Economic and Monetary Union of the EU, the impact the construction industry has is significant. Construction constitutes the largest industrial sector in Europe’s economy; with an output of 900 billion Euro it exceeds Japan’s construction industry by 10%, and that of the US by 30%. It is also Europe’s largest employer, providing jobs for 11 million workers and over 1.9 million businesses; and with each construction job generating another two positions in related sectors some 21% of Europe’s workforce therefore depends directly or indirectly on construction.

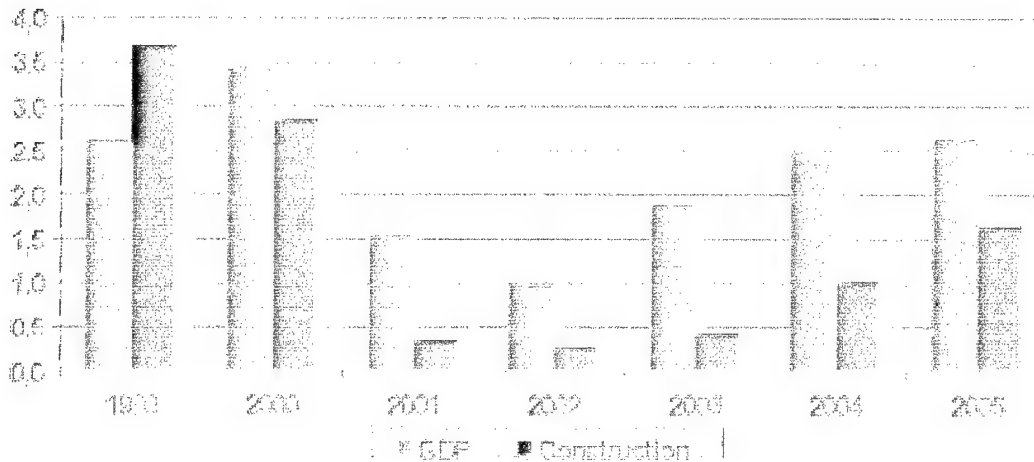
In this time of sociological, demographic, and rapid technical change, the industry is adapting to new challenges including:

- Multi-functional buildings capable of adapting to the changing nature of work and leisure.
- Housing for Europe's ageing population, providing comfortable and autonomous lifestyles.
- Provision of quality urban environments.
- Reduction of energy usage, buildings currently being responsible for more than 40% of total consumption.
- Reduction of waste; future building products need to be re-usable and recyclable.

The industry uses a wide range of technologies ranging from traditional, labor intensive, site-based crafts through to sophisticated industrial methods as are reflected in the growing use of major components and sub-assemblies (prefabricated off-site and delivered completely out-fitted). Computer and communications technologies arriving from the Information Society and e-commerce developments are changing traditional processes and management methods, reducing costs, optimizing resources, and creating more transparency in the value chain.

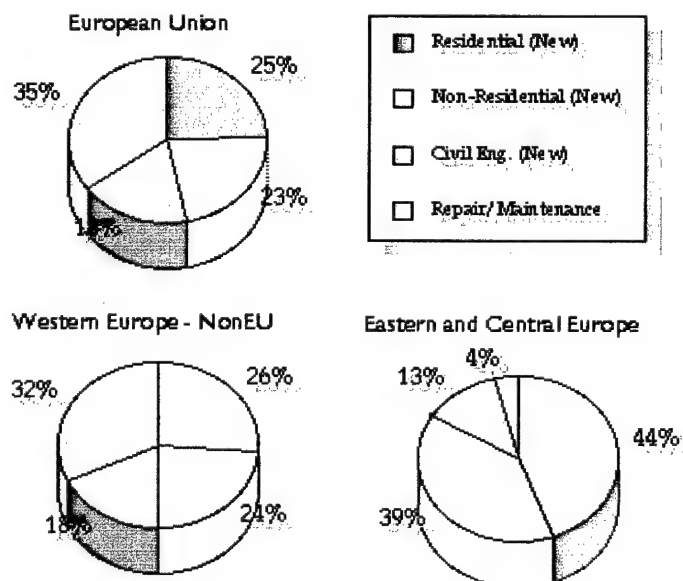


### 2.3. Construction as a Percentage of GDP



Construction as a percentage of GDP varies widely across the European construction region. In Portugal and Ireland, where there have been substantial increases in building and infrastructure investment, construction accounted for 18.3% and 17.3% of GDP respectively in 2001. In the bulk of Western European countries, construction as a percentage of GDP ranged between 9% and 11.5%. Sweden and the UK recorded percentages well below the average of 10% for the Western European economies as a whole in 2001 - with construction as a percentage of GDP as low as 7.6%.

### 2.4. Physical Output of the European Construction Industry



*Figure: Physical Measures of Construction (Davis Langdon Consultancy, 1994)*

Financial measure of construction output only gives a partial picture of

the relative strengths of the various construction markets across Europe, particularly for countries with volatile exchange rates. For this reason a measure of physical output can be useful. Neither of these techniques is foolproof. Construction techniques and types of dwellings vary from country to country, but they provide another way of looking at the market.

The picture of the market generated this way is quite different to one based on financial considerations alone; in terms of dwellings constructed Eastern and Central Europe dominates the market. Even in terms of dwellings constructed per 1000 capita it still scores (3.6) higher than the European Union (3.5). However, these dwellings clearly use less cement, and are more cheaply built than their western European equivalents. The European Market shows differences across its three broad areas, not only in terms of the output, but in the areas in which construction is carried out. "Output" has been broken down into four categories: new Residential Construction, new Non-residential Construction, new Civil Engineering work and repair and maintenance. This breakdown is graphically summarized in the next figure.

It is apparent that the Western European market, both within and outside the EU is fairly homogenous in terms of the types of construction work undertaken. The profile of the Eastern and Central European market is quite different, with much reduced levels of both repair and maintenance and civil engineering. This is principally a result of the swing to a free market economy in former eastern bloc countries. New building is the quickest way for private contractors to recover their investment, and many older buildings are beyond (cost effective) repair.

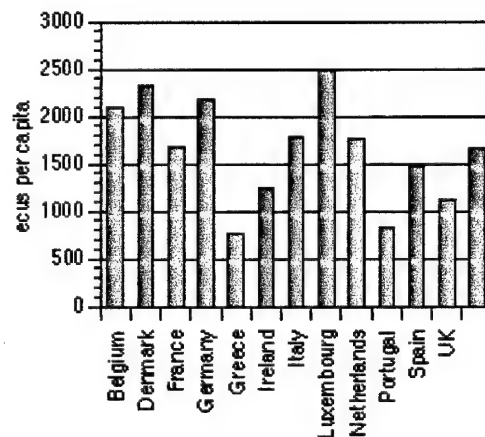
## **2.5. Employment in the European Construction Industry:**

The European construction industry creates employment for a large number of professionals. Reliable figures cannot be obtained for Eastern and Central Europe, but in the European Union (total population 377 million) there are 233 951 Architects, 171 244 Engineers, and 48 360 Construction Economists [source Construction Economics in the Single European Market, 1995]. This corresponds to 668 architects

per 1M inhabitants, a ratio far higher than for the United States (250 per 1M inhabitants). In the case of engineers the European figure is 431 per 1M inhabitants (comparable data for the United States was not available). Overall however, percentages of the population involved in the construction industry are similar for both the US and the EU (2.6%)

## 2.6. European Union (Powerhouse of European Construction Industry)

The European Union is the powerhouse of the European Construction Industry, leading Europe's other areas in terms of both financial and physical output. But just as Europe, in the wider sense cannot accurately be considered as a single market, neither can the EU. Germany, Italy and France are the three largest markets (146 billion, 102 billion and 97 billion Euros respectively) in the EU. But, in terms of per capita output, values vary considerably among the EU member states (from 797 Euros per capita in Greece to 2 500 in Luxembourg). These disparities are shown graphically in the figure.



*Per Capita Construction Output in the EU (Davis Langdon Consultancy, 1994)*

## 2.7. General State of Construction

Since 1991, after several years of growth, output in building and civil engineering had been stagnant. Productivity in the industry lagged significantly behind other sectors. The social needs that the sector should be satisfying were a long way from being met.

Given appropriate levels of competitiveness, this latent demand could provide the engine for future growth in construction.

### **2.7.1. Structure of the Construction Sector within Europe**

Within Europe as a whole, the construction industry is fragmented and differentiated from other sectors, and is one in which small and medium enterprises (SMEs) and craftsmen play a key role. Even if large companies control a significant slice of the market, construction is, in comparison with other industrial sectors, far from being prone to "oligopolistic" or dominant tendencies. Indeed, in 1990, the turnover of the ten largest European construction companies only accounted for 5.75% of the total European market.

#### **2.7.1.1. Small and Medium Enterprises (SMEs)**

Small businesses are no less important in the generation of employment; they require an adaptation of legislation, regulations, procedures and systems to their level of capacity and potential. At present, it appears that this is rarely the case.

Specific European Community programs have highlighted the fact that measures need to be undertaken to help small businesses overcome their size disadvantages. A deepening of training and apprenticeship initiatives, improvements in the dissemination of information and the implementation of registration and qualification schemes are all initiatives that should be pursued.

Nevertheless, a key factor in increasing the competitiveness of small businesses lies in the development of closer co-operation and the creation of associations between themselves, incorporating such ideas as "networking" and the establishment of "quasi-businesses". In this way, SMEs could, amongst other things, share ideas, information and common services, such as administration, purchasing and information technology, or become integrated

into the networks of larger companies. There is a need to facilitate the efforts of SMEs to find business partners in other Member States or even in third countries. The first and foremost necessity for SMEs is to have an eased access to appropriate information on other markets. Then, for the subsequent phase of entry to another market, SMEs require a well organized support system for the establishment of business partnerships. The development of closer co-operation and partnerships on a reciprocal basis are essential ingredients for SMEs in the ongoing process of internationalization. The European Economic Interest Grouping (EEIG) can be mentioned as a specific instrument, particularly for SMEs, to favor European co-operation among enterprises and to remove some of the remaining transnational obstacles.

#### **2.7.1.2. Sub-Contracting Relationships**

Sub-contracting relationships cannot be neglected in a sector such as construction where they play a fundamental role. However, sub-contractors must not be confused with SMEs - all companies, even the largest, may be sub-contractors on some projects. The prevailing feeling in the industry is that that of an imbalance in the contractual conditions imposed on sub-contractors. The position of sub-contractors is considered to be vulnerable in the procurement and construction phases. All too often, the sub-contractor is only paid after the general contractor has received his money. A solution to this problem is considered to be necessary, based around the possibility for the sub-contractor to be paid directly by the client in the event of unjustified non-payment. In this context, it is worth mentioning the publication by UNICE and Directorate General XXIII of "Guidelines for Partnership in Industrial Subcontracting" in which recommendations are given on terms of payment.

#### **2.7.2. Competitiveness Improvement Initiatives**

The European Commission developed a system of communication with respect to the competitiveness of the construction industry in November 1997. The

Commissioner of Industry, Mr. Martin Bangemann, lead the initiative in order to develop a strategy of enhancing a stagnant competitiveness in the construction industry in the European Union.

This system of communication identifies four strategic objectives aimed at enhancing the competitiveness of the sector. First, to develop a coherent quality policy, the Commission recommends the widespread adoption of quality schemes. Next to improve the regulatory environment, the Commission will act to consolidate and simplify legislation related to the "Single Market" and public procurement. Furthermore, the conditions necessary for sustained growth in provision of education and training at all levels are being created. The Commission announced its intention to reorient the resources for research and development towards the continually changing needs of the sector, and the better dissemination of research findings. The communication system proposed more than 60 specific actions aimed at fulfilling these strategic objectives.

#### **2.7.2.1. To Develop a Coherent Quality Policy for the Sector**

Quality in construction, or rather the lack of it, remains one of the basic problems for the sector. Low levels of specification and design, largely driven by price considerations, and too many defects and poor durability, exacerbated by cost-cutting to offset underbidding, contribute to a lack of quality that is estimated to cost between 5 and 10% of the investment. All actors must play their part in achieving quality in construction, the lack of which not only has serious consequences for the sector, but also for society in general. Quality will be a key element of sustainability, and in the long-term the economic benefits will substantially outweigh the costs.

The route to quality starts with the client, in the design and specification of the project and the criteria adopted to evaluate competing bids (or tenders). The most economically advantageous offer is not always the lowest. Life cycle costs, related to quality of design and construction, must also be considered in

the analysis. Better quality generally proves to be cheaper in the long run, through lower maintenance costs, higher rental income and so on. Quality continues through technical control of compliance with standards and regulations, the registration and qualification of enterprises, craftsmen and professionals based on their capabilities, and the quality assurance and quality management systems of the enterprises themselves..

The Commission recommended the widespread adoption of quality schemes. A proactive attitude both from the actors in the construction sector and from public authorities appears necessary to ensure the achievement of environmental objectives such as reducing the use of resources and energy, increasing re-use and recycling and proper disposal of waste. This would enhance the competitiveness of the construction industry, along with its job creation potential. Systematic integration of environmental concerns in technical specifications and norms, as well as in purchasing procedures, can contribute to this process.

#### **2.7.2.2. To Improve the Regulatory Environment**

Because of its impact on health, safety and the environment, the construction sector is highly regulated, both at the level of individual products and construction works. This inevitably has cost implications for business, and it is important that the legal framework be as stable and as foreseeable as possible. The existence of national rules for public procurement can also make tendering more difficult for non-national companies. The Commission will act to consolidate and simplify legislation related to the Single Market and public procurement in order to create a favorable and transparent framework for competitiveness, and remove existing barriers to trade.

#### **2.7.2.3. To Improve Provision of Education and Training**

The workforce, from university educated professionals to poorly qualified site laborers, lies at the heart of the construction industry, and must play a

fundamental role in bringing about improved competitiveness. Lack of investment in education and training for the workforce is found throughout the industry, stifling progress and creating a shortage of skilled workers in times of expansion. The Commission will take account of the key role of education and training in the construction sector, and help create the conditions to bring about a substantial and sustained growth in its provision at all levels.

Employment conditions form the other axis in the consideration of ways to maximize the efficiency of the workforce. The ability of the construction industry to recruit and retain the right caliber of person to meet the challenge presented by changing technology is crucial to future competitiveness. Improved productivity is often the direct result of enhanced working and employment conditions, whether in terms of job security, career structure or levels of pay. Reducing the unacceptable level of accidents in the sector through rigorous implementation of health and safety measures will also serve to enhance the attractiveness of the sector.

The communication initiative asks Member States and industry to create the conditions necessary for sustained growth in provision of education and training at all levels. The Commission will help to create these conditions.

#### **2.7.2.4. To Reorient and Reinforce Research and Development**

New products and new techniques represent key factors in allowing any sector to keep pace with the constantly changing needs of the marketplace. Considerable benefits can be achieved, for example, by shortening project lead times, lowering construction costs, reducing building defects and improving management structures. The Commission proposes measures to reorient resources towards the real, and continually changing needs of the industry, and the better dissemination of research findings.



### **2.7.3. Markets**

For a sector heavily dependent on public investment, the existence of long-term infrastructure plans, social housing and non-residential public buildings (schools, hospitals, offices, etc.) have a positive effect, as does any investment policy with a level of temporal stability. These plans must, however, be respected. Equally, public authorities can favor sustained growth with well planned initiatives, particularly in the housing sector. Fiscal measures, interest rates, indirect costs, particularly those related to workers, and the elimination of regulatory barriers are amongst the most effective. Public authorities can also effectively promote the use of environment-friendly construction products by establishing appropriate procurement policies.

Construction is closely linked to variations in the economy. In this respect, it responds in a direct and immediate way to changes in the economic cycle. At the same time, given its multiplier effect, it can be used as an instrument to bring about changes in the cycle. However, these artificial stimuli to demand and "stop-go" policies have negative repercussions in the interim, because they do not correspond to natural increases in demand.

#### **2.7.3.1. Public Investment in Infrastructure**

Low growth rates and the climate of budgetary restraint in European economies effectively constrain the opportunities for public investment in infrastructure. This has led to a growing interest in private financing, a direction adopted by the majority of member states, who are considering the best means of achieving the participation of private initiatives in the design, construction and use of infrastructure.

The same is true at a Community level. Within the framework of setting-up 14 priority projects for the Trans European Network (TEN), it was decided to adopt the conclusions of the so-called "Christophersen Group", which argued for development of the objective to favor public-private partnership (PPP)

schemes in financing these infrastructures. A High-Level Group (HLG) on Public-Private Partnerships Financing of Trans-European Network Transport Projects, the "Kinnock Group" (named after Commissioner Kinnock), was convened in this context. The Group finalized its report in May, following which the Commission adopted, on 10 September 1997, a report which explains how it intends to follow the HLG recommendations. Commissioner Kinnock presented the report to the Transport Council on 9 October. The Council, on 9 October, adopted conclusions welcoming the Commission's Communication and endorsing the use of PPP.

In line with the conclusions of the "Kinnock Group", the construction industry considers that three conditions are particularly important to facilitate the participation of the private sector in infrastructure financing:

- 1. If the rate of return available from exploitation of the infrastructure project is lower than that offered by alternative long-term investments, then the difference should be compensated for by the public sector, through measures such as : a reduction in the financial risks of the project, a guarantee of a minimum level of use, public sector contributions to construct a part of the infrastructure, etc, without prejudice to the normal implementation of Articles 92 and 93 of the EU Treaty.*
- 2. Given the long-term nature of this type of investment (25, 30, or even 50 years), the private partner must be guaranteed compensation if the legal, regulatory or normative framework affecting the investment is changed.*
- 3. A flexible interpretation of the procedures for the award of public contracts for concessions where overall aspects need to be considered (conception and development of systems, detailed design, execution of the project, use and maintenance). In any case, intellectual property rights must be respected in situations where the execution of the project is carried out by a different entity from that which developed the idea. In this respect, the final report of the so-called "Kinnock Group" proposes the elaboration of "guidelines" to clarify the application of public*

*procurement directives in the case of concessions, and the Commission intends to present such guidelines.*

#### **2.7.3.2 International Market**

Internationally, the European construction sector is highly competitive in the fields of design, technology, management, equipment and manpower; whence its position in the export market for construction services. These exports involve the movement of assets and highly skilled personnel. In parallel, the activities of large European companies in the movement of capital via direct investments are increasing, particularly in other parts of the EU, the United States, Latin America and South-east Asia. These direct investments take different forms, including the take-over of or merger with local companies, involve the transfer of technology, investment and know-how, and can provide the means for privileged access to important markets.

#### **2.7.3.3. Financial Aspects**

Financial aspects are becoming more and more important in awarding public contracts internationally. Indeed, the financing of works has become an important factor in competitiveness, and can prevail on the final offer price, the technical competence of the enterprise, the timetable, or the various technical solutions proposed. In this regard, the position of the Community's businesses appears to be weak with respect to their principal competitors. A Directive is being prepared to harmonize the fundamental principles of the diverse public systems of export credit insurance for transactions in the interim and long-term. This Directive will promote a better co-ordination of national agencies, which could improve the competitiveness of Community exports.

#### **2.7.3.4. Exports**

At an international level, a number of export opportunities exist. For example, the World Trade Organization (WTO) Agreement on Government Procurement (GPA) allows EU industry to access a number of public contracts awarded by those third countries which are parties to the agreement. Work is ongoing in the WTO to try to expand the coverage of the GPA, both in terms of membership and of the number of contracts covered, which should increase the export opportunities available. Similarly, opportunities will develop as the associated countries of Central and Eastern Europe harmonize their economic regulatory base with that of the EU as part of the enlargement process.

Finally, mention also should be made of the existence of diverse and very different market access barriers in certain countries and regions of the world, where export opportunities for construction services exist. One important condition for the internationalization of the European construction industry is the provision of increased market access opportunities in third party countries and access to relevant and easily available information on the possibilities for operating and trading abroad. A significant step has been the adoption of the Market Access Strategy and the establishment of the interactive Market Access Database. This makes it possible for the industry, including SMEs, to inform the EU of barriers they encounter while operating abroad, thus enabling the EU to act on its behalf, making full use of the WTO Dispute Settlement Mechanism (a further step which is gradually being developed consists of the provision of information about conditions and requirements for access to third countries).

#### **2.7.4. The Likely Affects of the Conflict in Iraq**

The general economic slowdown, together with budget constraints in the member states and the conflict in Iraq, are likely to be an obstacle to a recovery in

construction activity in the European Union (EU) during the current year. The relevant figures indicate that, as happened in 2002, stagnation in construction activity growth can also be expected in 2003.

---

### **3. Standardization**

#### **3.1. European Policy Principles for International Standardization**

Europe has an interest in international standardization because of its potential to eliminate technical barriers to trade and to increase market access for all.

International standardization also offers the possibility to promote and disseminate technologies.

The standards making process should respect some basic requirements: openness, transparency, consensus and participation of all interested parties. If regulatory authorities decide to make recourse to international standards it is important that they can make use of standards from standards bodies which can be held accountable for establishing consensus between all national positions and interested parties.

International, European, and national standardization should complement each other. It can be of particular value to consult between stakeholders nationally and represent national positions independently in the international context. For that purpose, it is important that the national standardization systems allow for effective participation by all interested parties, and national positions are coherent with European policies and legislation, if existing.

##### **3.1.1. World Trade Organization (WTO) International Standards**

To have one applied standard and one accepted test for each product, process or service is a trade-facilitating objective. International standards have a maximum effect in trade facilitation when they are part of a single and coherent set of standards. If international standards are used in relation to technical regulations as promoted by the WTO Agreement, international standards bodies need to have a

clearly defined constituency. The relevant WTO principles taken as a whole ensure that international standards bodies are open to participation by national standards bodies and produce international standards that do not conflict with each other.

The voluntary use of standards in regulation requires a clear definition of each party's roles and competencies. Voluntary standards can nevertheless reduce the need for regulation, respectively government intervention.

### **3.1.2. Efficiency of International Standards Bodies**

Measures to improve efficiency of international standards bodies should further be deployed. Striving for more efficiency should not conflict with accountability.

It may be beneficial to channel standards, specifications and other deliverables into the international standardization process that have reached a certain consensus outside international standards bodies. Co-operative arrangements with international standards bodies offer a systematic framework to take over international standards and/or to contribute to the international standards making process.

The EU generally supports, in line with its political objectives, the development of a (preferably regional) infrastructure for standardization. The EC also promotes the creation of legal and economic conditions which facilitate trade and which are receptive to the use of voluntary consensus standards.

European actors should communicate with each other to ensure mutual understanding and positions in respect of legal requirements or in support of policies of the EC. While representing their own constituencies in specific discussions European actors are invited to follow these principles which, taken together, define the European policy in relation to international standardization.

### **3.2. The European Committee for Standardization (CEN)**

The European Committee for Standardization (CEN) {Comite` Europe`en de Normalisation, Europaisches Komitee fur Normung} is developing European Standards used in building and civil engineering that cover a wide range of products, materials and structures.

CEN standards are usually prepared at the request of industry. Standards prepared at the request of the European Commission - to implement European legislation - are known as mandated standards. When mandated standards are prepared under the new approach directives, they are known as "harmonized standards" and are cited in the *Official Journal of the European Communities*. Products manufactured in accordance with harmonized standards benefit from a presumption of conformity to the essential requirements of a given directive.

Non-harmonized standards do not need a mandate under the new approach directive in order to be developed. These standards aim to satisfy a need in respect of quality between the producer and user (or buyer).

### **3.3. A European Standard Form of Contract**

Why should it be necessary to have a standard form of contract throughout the EU? There are several reasons. To begin with, one goal of the EU is to develop a single market for all its members. In order for competition to work effectively, all eligible contractors within the EU should be able to compete for construction contracts anywhere within its boundaries. In order to do this, one set of clearly defined rules needs to be identified. A clear standardization of contract form throughout the EU will foster an environment where construction projects are completed safely, on time, with good quality and utilizing the best innovation achievable.

The construction industry is heavily dependent on public financing, giving national authorities a crucial role in creating the conditions for market stability and sustainable growth. Budgetary constraints are however leading most Member States to incorporate private initiatives in the design, construction and use of infrastructure. In

this climate it is essential that the regulatory environment be continually adapted to the changing needs of the sector. This includes the selection and operation of procurement systems which also have a direct influence both on the market and on competitiveness.

The European Commission is seeking to improve the framework of public procurement, particularly in respect of the needs of public-private financing, and to promote the implementation of best practice procurement procedures in both public and private sectors.

The existing legal framework also has a profound influence on the implementation of the Single European Market in construction products. The achievement of a successful and efficient implementation will necessitate an adaptation of the legal framework, creating a market in which the role of the national authorities is limited to the surveillance of operations carried out by manufacturers themselves.

#### **3.3.1. Safety:**

Safety has always been a concern within the construction industry. Different countries have different requirements and standards with respect to application of safety measures. Therefore, it is obvious that the EU has to standardize its requirements with respect to safety issues such as: health, hygiene, environment, noise pollution, fire, mechanical resistance and stability, fire, energy and heat retention.

#### **3.3.2. Timeliness**

The concept of time is extremely different from one culture to another. The importance of timely completion is stressed far more in some cultures than others. This applies not only to the completion of entire projects, but also to material procurement and subcontracts. All these issues must be considered when formulating estimates to bid on construction contracts. Since the EU deals with



so many different cultures simultaneously, it is important to have a standardized set of guidelines for reference by all bidders on a project.

### **3.3.3. Quality**

Formal, well-structured procedures that encourage good communication are fundamental for filtering the quality concept down to lower levels of staff. These procedures are increasingly supported by the use of IT systems. A quality-aware culture where 'second-best' is unacceptable, drives forward the development and implementation of quality initiatives. The full involvement of lower levels of staff is of utmost importance: without it any initiative will fail.

Implementation of quality schemes based on the principles of Total Quality Management (TQM) and the EN ISO 9000 series of standards as part of the contract form has helped ensure quality within the construction industry. This will benefit companies through the continuous improvement of overall performance and the increase of customer satisfaction. Traditionally, quality methodologies have been associated with manufacturing and few companies in the construction sector have seized the opportunities that these quality systems are able to bring.

### **3.3.4. Innovation**

The competitiveness of the construction sector depends more and more on its capacity to innovate, at the process level, in product development, in the organization of the workforce and in the rapid diffusion of new technologies. Increased investment aimed at research and development (RDT) is essential in this respect, especially when one takes into account its role in accelerating the penetration of new technologies into the construction industry, its contribution to the development of new markets and to the improvement of standards and regulations. There is also a need to more effectively co-ordinate the intervention of the public sector with the efforts of the private sector.

Constant adaptation to changing needs is the key goal for research and development in construction. In particular, improvements in the overall construction process, from initial conception to execution and beyond will enhance the competitiveness of individual enterprises and the sector as a whole. Considerable benefits can be achieved by, for example, shortening project lead times, lowering construction costs, reducing building defects and improving management structures. A progressive reorientation towards the goals of sustainable construction and renovation and towards the satisfaction of basic and social needs will also contribute to increased competitiveness, while at the same time benefiting society as a whole.

Procurement methods that are transparent and that lend themselves to objective assessment and comparison are more likely to lead to improved project results than those that make a mystery out of the process. Efforts to improve supply chain management are frustrated by a reluctance to address this issue. Serious attention needs to be directed to this area in order to activate the value chain for construction.

#### **3.3.5. Where Does This Effort Currently Stand Within the EU?**

The process of achieving mutual recognition of professional qualifications within the industry appears to be fairly well-advanced. The same cannot be said for a harmonized system of guarantees and defect insurance. Nor can it be said about the introduction of a single form of European construction contract.

Some say that there has been more interest in this single contract form inside the UK than in any of the other Member States. For instance, in 1991, the Institution of Civil Engineers promoted its "New Engineering Contract" as a form of contract suitable for this purpose. The concept of a single European form of contract was raised as one possible method of harmonization in the Consultation Document itself.

#### **3.3.5.1. Different Legal Systems in Member States**

One of the major stumbling-blocks to the development of such a form of contract is the fact that the different Member States still have fundamentally different legal systems. Although this might not affect how a contract operates as a management tool, it is of fundamental importance as far as the meaning and the legal effect of the contract are concerned. For this reason, while fundamentally different legal systems continue to operate within Europe, it seems unlikely that the introduction of a single European form of contract would have much practical value.

#### **3.3.5.2. Domestic Projects**

Another issue is whether there is any need for such a form of contract for domestic (i.e. purely national) projects. The UK, for instance, has many different published standard forms based on different procurement methods available to users. The rationale for a European standard form of contract must surely be principally for projects involving parties from different Member States. However, most of the large European contractors, who would be involved with that type of project, already have their own forms of contract on which they would prefer to bid. They would generally be familiar with most of the domestic forms of contract which they would encounter in different Member States. Therefore, a standard form of contract would probably not add value to this type of system.

#### **3.3.5.3. Counter-Productive to the Extension of the Single Market?**

A further issue is whether the introduction of a standard form would in practice be counter-productive to the extension of the single market. Some argue that it would be an undue interference in freedom of contract and trade, especially if it was introduced other than on a purely voluntary basis.

There has, nevertheless, recently been a development, particularly significant because it represents an entirely voluntary step by the industry, which suggests that a European standard form may still work. In its Annual Report for 1996, FIEC stated that it was in the process of finalizing a document intended to form a checklist wherever a general contractor is used in the European context. FIEC hoped that this document would in time form a basis for the creation of a skeleton for model contracts to allow contracting parties throughout Europe to work beyond their national borders on a basis clearly understandable to all. That document was produced last year and FIEC is now understood to be working on a similar document for sub-contracting.

#### **3.3.5.4. Advantage for Public Procurement**

The strongest case in favor of the introduction of the single European construction contract form is public procurement. It is clearly difficult for a Spanish contractor to compete on equal terms with a French contractor for a public works contract in France when he is asked to bid on the basis of a French contract and French law and regulations with which he is not as familiar. However, much less drastic measures than the introduction of a standard form of contract could be adopted to put him on a more equal footing with local contractors. One example is ensuring that copies of forms of contract used locally in the various Member States are freely available throughout the Community.

#### **3.3.5.5. How Would These Principles Interact With Existing Contracts and the Legal Systems of the Member States in Practice?**

The European Construction Industry Federation (FIEC) describes the checklist document it created for the Annual Report in 1996 as a "reference memorandum" to be used in the preparation of contracts involving general contractors and states that it is not designed to replace standard forms of contract currently existing at national level. Nor, it states, are they intended to

encroach in any way on the particular legal rules of any Member States. Indeed, FIEC goes out of its way to acknowledge the national nature of the industry:

"The profession [i.e. general contracting] developed in all European countries on the basis of principles governing contractual ties which have been established in national form of contract with a general contractor or in codes of contract."

It appears that the principles would operate in practice as a voluntary code of conduct. They would neither have the force of contract nor of law. The objective of the document is therefore relatively limited and long-term, no doubt reflecting FIEC's perception of the practical realities.

The concept of harmonization through contracts, which is taking the argument one stage further, has received support in learned academic circles. In their paper, "European Harmonization in the Field of Construction", John Uff QC and Nerys Jefford argued forcefully in favor of harmonization through contract rather than through regulation or legislative intervention:

"It is evident that full harmonization of commercial law is not an option, either generally or specifically in relation to construction. Nor is it practicable to think of achieving effective harmonization solely through legislation ... We suggest that, while some areas of construction law or practice are amenable to direct harmonization, in other areas a more appropriate course would be to achieve commercial harmonization through the vehicle of contracts. This approach has its own advantages in terms of flexibility and offering participation to the construction industry."

Interestingly, however, Uff and Jefford themselves recognized that harmonization through contract would by no means be a complete answer.

Indeed, their paper suggests that, without some degree of harmonization of laws, this form of "soft" harmonization is unlikely to achieve a great deal in practice. They advocated, for instance, harmonization of the European general law relating to assignment and arbitration.

### **3.4. Construction Products (Materials):**

By definition, construction products are those produced for incorporation in a permanent manner in the construction works and placed as such on the market. The term includes materials, elements and components of prefabricated systems or installations which meet the essential requirements.

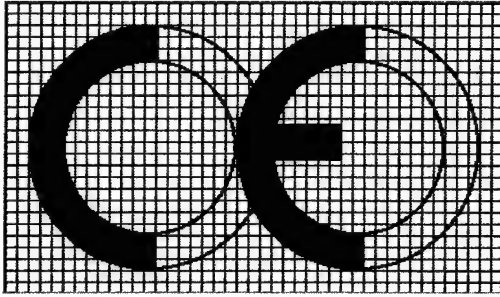
The focus of this section of the report will mainly be on construction materials and the requirements stipulated by the necessity of the CE markings required by the EU's construction industry.

#### **3.4.1. Construction Products Directive (Appendix B)**

On 21 December 1988, the European Community established a directive on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products. This directive, Council Directive 89/106/EEC, is called the **Construction Products Directive (CPD)**.

A **Directive** is a legal device used by the European Union to establish policy at European level. Directives have to be transported by Member States into their own legal system. The CPD is potentially applicable to all products "produced for incorporation in a permanent manner in the works" (including both buildings and civil engineering works). The CPD aims to remove technical barriers to trade and to allow access the market for as many manufacturers as possible. The CPD is a "New Approach" directive which calls for the definition of essential requirements without reducing existing levels of protection.

### 3.4.2. Qualification of Construction Materials



The European Commission stipulates in the CPD that all construction materials on EU projects must have the CE marking attached. The CE marking signifies that the product is conforming to the provisions of the Construction

Products Directive, including the conformity assessment procedures. The CE marking is required to be followed by the identification number of the body involved in the production control stage. Additionally, the CE marking shall be accompanied by the name or identifying mark of the producer, the last two digits of the year in which the marking was affixed, and where appropriate, the number of the EC certificate of conformity and, where appropriate, indications to identify the characteristics of the product on the basis of the technical specifications.

### 3.5. Technical Specifications

In order to function as a single market entity, the EU needs to develop standardized technical specifications. Customers and contractors alike need to know what the requirements are in the construction industry and what the product will be. As with the standardized contract form, the standardized specifications will allow for safe, timely completion of quality products. No matter where the construction takes place within the European Union, the end product will be the same and the requirements on the contractor will be the same.

Standardization of technical specifications is an on-going process. The following paragraphs will explain how these requirements are being developed and implemented.

### **3.5.1. Structural Eurocodes**

Structural Eurocodes, referred to as “Eurocodes”, are common structural building and civil engineering structures. Eurocodes are applicable to whole structures and to individual elements of structures and apply to the use of all the major construction materials such as concrete, steel, timber, masonry and aluminum.

CEN Technical Committee was established in 1990 and developed the first Eurocodes as pre-standards. Now the committee is transforming these pre-standards into European Standards.

### **3.5.2. Guidance Papers**

In order to ensure as far as possible a common understanding between the Commission and the Member States as well as among the Member States themselves as to how the Directive will operate, the competent services of the Commission, assuming the chair and secretariat of the Standing Committee, has issue a series of ***Guidance Papers*** dealing with specific matters related to the implementation, practical implementation and application of the directive. These papers are not legal interpretations of the directive. They are not judicially binding and they do not modify or amend the directive in any way. Where procedures are dealt with, this does not in principle exclude other procedures that may equally satisfy the directive. They are primarily of interest and use to those involved in giving effect to the directive, from a legal, technical and administrative standpoint. They may be further elaborated, amended or withdrawn by the same procedure leading to their issue.

## **3.6. Two Entities Exist That Help the EU Regulate These Guidelines:**

### **3.6.1. European International Contractors (EIC)**

As a professional association, EIC represents the interests of the European construction industry in all questions related to international construction activity. In order to fulfill this task, EIC is in constant contact with all relevant European



and international organizations with the aim to foster the improvement of the legal and economical environment for international construction. In this connection, the most prominent topics to be dealt with today on a priority basis are: international contract and tender conditions, questions related to international financing, including Build Operate Transfer (BOT) schemes, export credit insurance issues and the identification and elimination of market access barriers outside the European Union. EIC provides a unique forum for European international contractors to meet and exchange experience about their international construction business.

### **3.6.2. European Construction Industry Federation (FIEC)**

The FIEC deals with internal construction industry issues within the EU. It speaks for the European construction industry in the context of the European harmonization and integration process. It is in close contact with the institutions of the European Union.

### **3.6.3. How Do These Organizations Cooperate?**

EIC is a legally independent federation which co-operate closely with the FIEC. The EIC and FIEC carry out complementary tasks. While FIEC, which speaks for the European construction industry in the context of the European harmonization and integration process, is in close contact with the institutions of the EU, the activity of EIC aims primarily at improving the international environment for European international contractors. For this purpose EIC maintains relations with international and other organizations, the activity of which is of importance for construction abroad.

## **3.7. Information Technology**

Better communication through the increased use of information technology (IT), allows more detailed designs with more frequent updates, a better integration of design inputs from specialist consultants and suppliers, leading to more efficient

specifications and a significant reduction in costly variations, claims and other problems on site, due to inefficiencies in the earlier phases of the project or changes in specification demanded by the client. Electronic procurement could greatly facilitate the supplier-client relationship, especially where the transmission of huge volumes of tender materials is involved. The Commission is developing the SIMAP (Système d'Information Marchés Publics) initiative in this area, although the scope for full electronic procurement might be limited by the complexity of the procurement of construction services

### **3.7.1. E-Tenders and E-Project Management**

Construction within the EU is migrating towards the implementation of e-tendering (or bidding) and e-project management (web-based). This is a significant step towards furthering the construction industry in Europe.

Tendering for services is a lengthy and costly process of compiling vendor lists, copying and collating work packages, distributing the bid documentation and communicating with bidders. Therefore, a growing trend towards submitting tenders (or bids) electronically has allowed for more efficient processes. Electronic solicitations answered by electronic tenders allow for faster contract awards and help streamline the contracting process. Benefits include:

- Faster end-to-end process of tendering from initial bid to tender award
- Reduced administrative overhead and cost of preparing work packages
- Drives bidder compliance to a common tendering process
- Improves visibility of and commitment to deadlines with bidders
- Maintains complete confidentiality of all parties' work in progress
- Quickly and easily informs all parties of any changes and issues as they occur

Projects consume significant time and resources in preparing and distributing documentation, communicating with the team to ensure that everyone is working with the most recent versions, and managing project deadlines. Therefore, web-

based electronic project management allows for better organization, communication and documentation for all stages of the process. Benefits include:

- Reduces the risk of errors and rework in the building process
- Saves time in the comment and approval process
- Eliminates the risk of losing important files and documents
- Improves team communication and the coordination of tasks and activities
- Ensures proactive management of project deadlines
- Resolves work conflicts quickly and reduces disputes

#### **4. Work Force Integration**

##### **4.1. Human Resources**

Construction is a labor intensive industry, particularly in its final assembly stage on site. Traditionally, the industry has absorbed large numbers of poorly qualified labor from the lowest strata of educational achievement, along with unskilled immigrant workers willing to work below industry agreed rates. This profile is in stark contrast to the future needs of a modernized sector, which is to develop a stable, well-qualified workforce capable of delivering improved quality, increased productivity and better value for money. To bring about the latter scenario, the strategic objectives of the construction industry is to improve employment conditions and job satisfaction; improve education and training at all levels to raise the level of skills and competence; adapt to changing technology which will reduce the hard and unpleasant tasks in construction; and promote employment, recruitment and job security.

A current, and growing, problem for the construction industry is its inability to recruit and retain people of sufficient caliber and competence, particularly for site operations. Construction work has a poor image and is often perceived to be dirty, dangerous, exposed to bad weather, unhealthy, insecure, under-paid, of low social status and with poor career prospects for educated people, especially school drop-outs who see better opportunities in occupations in manufacturing and services.

The construction industry as a whole must work to enhance its image, by taking every opportunity (for example through the media, schools and professional associations) to raise awareness and project a positive image for the industry, stressing construction's central role in shaping the environment to the potential benefit of all. Above all, however, the industry must create the working conditions that provide prestigious, rewarding, creative and secure careers for its members.

#### **4.2. Challenges**

Part of the challenge that the EU faces in integration is the utilization of different labor pools within the Union. Steps have been taken to eliminate barriers that previously impeded open competition in this single market. The following article taken from [www.buildonline.com](http://www.buildonline.com), a European construction website detailing work force directives, describes the regulations regarding Europe's construction workforce.

##### ***Freedom of movement for workers***

*The legal basis for the free movement of workers within the EU is found in the Directives. Articles 3(1)(c), 14 and 39 to 42 (3(c), 7a and 48-51) ECT.*

##### ***Objectives:***

- *Increasing the Community's workers' chances of finding work and adding to their professional experience;*
- *encouraging the mobility of workers, as a way of stimulating the human resource response to the requirements of the employment market;*
- *developing contacts between workers throughout the Member States as a way of promoting mutual understanding, creating a Community social fabric and hence "an ever closer union among the peoples of Europe", the main aim of the Treaties.*

### ***Current general arrangements on freedom of movement***

*Any citizen of a Member State has the right to move freely with his or her family to other Member States in order to take up employment and to work under the same conditions as citizens of those countries.*

### ***Workers' rights of movement and residence***

- *Movement: Community citizens are entitled to leave their country of origin (which may not insist that they have an exit visa) in order to go to another Member State; the latter may not require them to hold an entry visa; an identity card or a passport is sufficient. As part of efforts to scrap all checks on people at internal Union frontiers, the Commission has proposed amending Directive 68/360 to remove the requirement to produce an identity document when crossing the frontier.*
- *Residence: The right of residence is regarded as being linked to the right to take up a job [under Article 39 (48) (3)(a) ECT, as it entails the right 'to accept offers of employment actually made'] and so should not be exercised simply in order to look for work. After three months, which is considered sufficient time to find a job, the right of residence should result in the issuing of a permit (other than the residence permit for "ordinary" foreigners) called a "Residence Permit for a National of a Member State of the EEC" (Article 4 of Directive 68/360): it is issued on production of the identity card with which the person in question crossed the border and of a statement of engagement from the employer or a certificate of employment. It is issued automatically (whereas other foreigners receive 'permission' to reside, which implies that the national authorities have discretionary powers). The permit is valid for at least five years and is automatically renewable even if holders have lost their job.*

### ***Rights of entry and residence for family members***

- *The spouse of a worker who is a Community national, their children who are under 21 or dependants, and their dependants in the ascending line have the*

*right to settle with the worker (Regulation 1612/68, Article 10(1)), provided the worker has housing that is considered suitable (Article 10(3)).*

- *If the family members are citizens of a Member State they may not be required to hold an entry visa and are also themselves entitled to be issued with a Residence Permit for a National of a Member State of the EC. If they are nationals of a third country, they may need to have a visa but they receive a residence permit with the same validity as that of the worker.*

### ***Taking up employment***

*Nationals of a Member State (community workers/citizens) have the right to take up employment within the territory of another Member State on the same terms as national workers (Article 1 of Regulation 1612/68). National provisions which are restrictive (limiting the number or percentage of foreigners who may be employed per company or per sector at regional or local level or reserving certain jobs for nationals) or discriminatory (subjecting foreigners to procedures or conditions which do not apply to nationals, e.g. work permits) are not, therefore, applicable to Community citizens. Spouses and children of workers are also entitled to work even if they are not Community citizens (Article 11 of Regulation 1612/68).*

### ***Treatment at work***

*Community workers must be treated in the same way as national workers:*

- *In respect of any conditions of employment or work, especially as regards remuneration, dismissal and reinstatement or re-employment (Regulation 1612/68, Article 7(1) and (4)),*
- *In the case of benefits not directly connected with employment, i.e. social and tax advantages, including vocational training, housing benefits, aid intended to ensure a minimum subsistence level and family allowances (Article 7(2) and (3) and Article 9 of Regulation 1612/68).*

- *In respect of trade union responsibilities and staff representation duties in their undertaking, although they may not be allowed to take part in the management of bodies governed by public law (they may not be elected to social security authorities).*

### ***Right to remain in the host country after working there***

*Laid down in the EC Treaty [Article 39 (48) (3)(d)], this right was spelled out in the Commission Regulation of 29 June 1970 (1251/70) which allows workers to remain permanently in the state where they last worked, provided they have worked and lived there for three years or have reached the age of retirement or suffer from permanent disability. The same goes for those members of their family who live with them.*

### ***Restrictions on freedom of movement***

#### ***Restrictions on the right of entry and residence***

*The EC Treaty [Article 39 (48) (3)] entitles Member States to refuse to allow Community nationals to enter or live in their territory on grounds of public policy, public security or public health. A directive of 25 February 1964 (64/221) however, attaches certain conditions to this power and the Court of Justice has kept a careful watch to ensure they are fulfilled.*

*The reservation on the grounds of public health is well defined as it only applies to the diseases or disabilities listed in the directive (Article 4). The concepts of public policy and public security are not well defined but the directive (Articles 2 and 3) sets limits to them: if they are cited, an appeal may not be based on economic grounds but solely on the personal conduct of the individual concerned: the mere existence of criminal convictions or the simple expiry of the identity card will not constitute sufficient grounds.*

*In the absence of a definition in Community law, the Court of Justice has assumed the right to monitor Member States' interpretation of what public policy means. According to jurisprudence:*

- *States may only have recourse to the public policy reservation exceptionally and in a limited way;*
- *Measures may not be collective or reflect a wish to achieve general exclusion;*
- *In accordance with the principle of equality of treatment, the conduct in question must also be punishable when exhibited by nationals.*

### ***Restrictions on taking up jobs in the public service***

*The EC Treaty [Article 39 (48) (4)] ruled out freedom of movement in the case of "employment in the public service". In order not to leave the assessment of this concept to the discretion of Member States, where the legal situation of public service employees varies so much and the Member States could abuse this exemption, the Court of Justice was obliged to define it. It rejected the description of the legal relationship between the worker and the public service (manual worker, non-manual worker or official; public law or private law relationship, see Case 66/85, 3 July 1986) as a criterion and adopted a functional view: jobs in the public service were those "which involve direct or indirect participation in the exercise of powers conferred by public law" as characterized by exercise of a power to constrain individuals or by association with higher interests, such as the internal or external security of the State.*

*In a statement on 5 January 1988, the Commission listed the activities which it considered formed part of the "public service": these were, firstly, the specific functions of the State and allied bodies, such as the armed forces, the police and the other forces of order, the judiciary, the tax authorities and the diplomatic service and, secondly, employment in government departments, regional authorities and other similar bodies, and central banks, where this involved staff*



*(officials and other employees) who carried out activities organized on the basis of a public legal power of the state or of another legal person governed by public law.*

### ***Measures to encourage freedom of movement***

#### ***Mutual recognition of training***

*Freedom of movement is often hampered by differences in training from one Member State to another.*

*This is true particularly in the case of regulated professions for which states have prescribed purely national certificates and diplomas which they require the citizens of other states to possess, thus restricting considerably the practical significance of the freedom to take up employment without formally contravening the rule of non-discrimination on the basis of nationality. Not being able to harmonize the training concerned, the Community has followed the course of mutual recognition of certificates and diplomas:*

- *First for specific professions;*
- *Then on the basis of general systems of equivalence.*

*Such mutual recognition was introduced primarily so that the professions covered could be practiced on a self-employed basis but it also applies, of course, to employed persons.*

*The problem also exists in the non-regulated professions where failure to possess national professional qualifications, which are often the only ones known to employers, may hamper chances of finding work. Here the Community has introduced comparability of vocational qualifications: on the basis of a Council decision of 16 July 1985, comparability has been ensured for skilled workers in 19 vocational sectors; the result was published in the form of tables in the Official Journal.*

### ***Exchanges between young workers***

*To encourage freedom of movement, the EC Treaty [Article 41 (50)] stipulated that Member States should encourage the exchange of young workers within the framework of a joint program. This was first carried out through the PETRA program, which lasted from 1988 to 1994: it was aimed at young people between 16 and 28 undergoing non-university vocational training, and provides grants to enable them to spend from three weeks to three months doing vocational training (internship) in another Community country. Approximately 45 000 young people have already benefited from this. After 1994 the PETRA machinery was integrated in the wider framework of the Leonardo da Vinci program.*

### ***The EURES (European Employment Services) network (like an employment agency)***

*This was set up by Commission Decision 93/569/EEC of 22 October 1993 implementing Regulation 1612/68 mentioned above, to facilitate access to information by workers seeking a job in a Member State other than their own. This network is a data bank of job vacancies and applications (incorporating data from national administrations) and on living and working conditions in the Member States.*

## **5. Conclusions**

### **5.1. Future of the EU**

With the ever changing political climate in the world today, few things are certain. Therefore, the success or failure of the unification of Europe through the European Union is uncertain.

The ideal of creating a “United States of Europe”, as Churchill described, may or may not be achieved. The obvious parallel to the United States of America is weakened by the more blatant cultural difference throughout Europe. The differences in the Member States range from languages to culture to economic stability.

For the time being, however, there is a European Union with a common currency (for 12 of the 15 members) and a common goal. Within this union, the potential exists for another world “Superpower” to emerge and generate a strong economic and political entity. Therefore, the construction industry does have the potential to flourish within the EU.

### **5.2. Construction in the EU**

The construction industry is the largest employer in Europe. Not only does it support over 1.9 million businesses and 11 million workers directly, it also generates twice the amount of jobs in related sectors. Therefore, over 21% of Europe’s workforce depends either directly or indirectly on construction.

Because of the importance of construction in the European economy and workforce, the success of the industry is linked with the success of the EU. Extensive effort is being put forth to ensure the viability of construction as an industry in the EU.

### **5.3. Competitiveness in Construction**

Although the construction industry is extremely important to the EU, a stagnating economy has taken its toll on competitiveness and productivity. The EC has taken several steps towards improving this situation by addressing issues related to SMEs;

sub-contracting relationships; quality policy; regulatory environment; education and training; and research and development. It has proposed over 60 actions and strategies that are currently being implemented.

#### **5.4. Standardization**

Standardization of policy with respect to both internal and international construction projects is an ongoing developmental process. The European Committee of Standardization (CEN) is currently developing and implementing building and civil engineering standards that are congruent with standard business practice within Europe. Mandated and non-mandated standards are being recognized within the construction sector. Guidelines are also being used to help interpret the requirements.

Standard contract forms have both positive and negative impacts on the industry. The goal is to bring a level playing field to all eligible contractors when it comes to preparing bids (or tenders) for projects within the EU. Those companies already imbedded in the system would prefer to have more flexibility in contract form while those trying to break into the field would prefer a more structured approach towards contracting. Efforts are being made to find a common ground for all of the businesses within the industry. This makes the regulations less rigid, allowing for “voluntary” compliance with certain criteria.

The Construction Products Directive (CPD) has helped to formalize the standardization requirements for construction products. Conformity to basic standards of quality helps to improve the industry both internally and in the international perspective.

Standardization of the technical specification requirements within the EU helps to eliminate ambiguity in interpretation of requirements and delivery of quality construction projects. This on-going process has emerged through the development of structural “Eurocodes” and guidance papers. The FIEC and EIC were formed to

help the industry develop and implement these technical requirements both internally and internationally.

Information technology and e-business have gone a long ways towards improving the standardization process in the EU. By simplifying the effort required to communicate and process projects, e-tenders and web based project management systems have had a positive impact on the construction industry in Europe.

### **5.5. Workforce Integration**

The proper integration of human resources into the EU, will go a long way towards establishing a firm "single economic market." The ability for workers to move freely within the EU is one of the cornerstones of the charter of the EU. For a single market to succeed, all barriers to free trade have to be eliminated including hindrances on the workforce. Workforce integration benefits not only the individual workers, but also the construction contractors. Development of bids is easier and less expensive if the labor pool is bigger and more diverse within the region. Therefore, the directives developed by the EC that have freed the movement of the workforce within the EU have benefited the construction industry greatly.

Along with workforce integration, there must be a system for mutual recognition of training, education and professional licensing. Mutual recognition has been implemented by the EC through several directives.

### **5.6. Unique Concerns**

The distinct diversity of cultures within the EU presents unique problems to the construction industry. For example: The interpretation of contract documents is at best ambiguous under typical conditions. When the added element of varying languages is included in the interpretation process even more disputes can occur. Translation of documents is key for international projects. The literal translation of certain information can be far from its intended meaning if the translation fails to pick up on all the intricacies of the original language. In other words, the true meaning of

a document can be lost if translation is done incorrectly. This adds to the already difficult situation of agreeing on contract interpretation.

Other unique concerns of the construction industry within the EU include: acknowledgement of cultural impact to such things as schedule, payment of invoices, and work ethic. These things have to be taken into consideration when projects are design and when contractors are bidding on them.

### **5.7. Summary**

In conclusion, the status of construction in the European Union is optimistic. However, continual improvement and development is underway. Therefore, it is crucial for the industry to stay well informed of the changing environment and to communicate well in order to maintain a thriving commerce.

**APPENDIX A**  
**BACKGROUND ON THE EUROPEAN UNION**

## APPENDIX A: "BACKGROUND ON THE EUROPEAN UNION"

### 1. Introduction

The best way to describe the European Community (known today as the European Union) is to begin with the history of how it came about. Part of this history shows the development of the government through series of treaties. Then we will discuss the governing bodies of the community as well the Economic and Monetary Union (EMU). Furthermore, we will discuss membership in the union, expansion to new member states, and external relationships with other countries including the U.S.

### 2. History of European Community/Union

Until the end of World War II, numerous attempts had been made to unify Europe. The problem was that these efforts for in the form of "forcing" the countries to unite. Nations had strongly opposed all attempts to infringe on their powers and were unwilling to give up any control over their policies. Then some attempts were made to unite Europe using mutual cooperation. These early organizations were *international* or *intergovernmental* organizations that depended on the voluntary cooperation of their members; consequently, they had no direct powers to enforce their laws or regulations. After the end of World War II, the development of a *supranational organization* began. A supranational organization requires its members to surrender at least a portion of their control over policy areas and can compel compliance with their mandates.

#### 2.1. Early Stages

Postwar proposals for a European supranational organization had both political and economic motives. The political motive was based on the belief that only a supranational organization could eliminate the threat of war between European countries. Some supporters of European political unity, such as the French statesman Jean Monnet, further believed that if the nations of Europe were to resume their dominant role in world affairs, they had to speak with one voice and have at their command resources comparable to those of the United States.



The economic motive rested on the argument that larger markets would promote increased competition and thus lead to higher productivity and standards of living. Economic and political viewpoints merged in the assumptions that economic strength was the basis of political and military power, and that a fully integrated European economy would make conflicts between European nations less likely. Because many countries were concerned about giving up any control over national affairs, most of the practical proposals for supranational organizations assumed that economic integration would precede political unification.

Economic integration was launched in the wake of World War II, as a devastated Western Europe sought to rebuild its economy. On May 9, 1950, French Foreign Minister Robert Schumann announced a plan, conceived by French businessman-turned-advisor Jean Monnet, which proposed pooling European coal and steel production under a common authority.

## **2.2. European Coal and Steel Community (ECSC)**

The Schumann Declaration was regarded as the first step toward achieving a united Europe—an ideal that in the past had been pursued only by force. French foreign minister Robert Schumann, advised by Jean Monnet, proposed the integration of the French and German coal and steel industries and invited other nations to participate. While contributing to economic recovery, this plan would also control the raw materials of war. Schumann's motives were as much political as economic. Many Europeans felt that German industry, which was reviving rapidly, needed to be monitored in some way. The ECSC provided an appropriate mechanism since coal and steel are very important to many modern industries, especially the armaments industry. Belgium, the Federal Republic of Germany, Italy, Luxembourg, and the Netherlands accepted the French proposal and signed the European Coal and Steel Community (ECSC) Treaty in Paris on April 18, 1951. The Six set up the ECSC High Authority, to which member governments transferred portions of their sovereign powers. Coal and steel trade among the Six increased by 129 percent over the next five years.

The Schumann Plan created a supranational agency to oversee aspects of national coal and steel policy such as levels of production and prices. Not coincidentally, this mandate allowed the agency to keep German industry under surveillance and control. Determined to allay fears of German militancy, West Germany immediately signed on and was soon joined by the Benelux nations and Italy. The United Kingdom, concerned about a potential loss of control over its industry, declined to join.

The treaty establishing the ECSC was signed in 1951 and took effect early the following year. It provided for the elimination of tariffs and quotas on trade within the community in iron ore, coal, coke, and steel; a common external tariff on imports relating to the coal and steel industries from other nations; and controls on production and sales. To supervise the operations of the ECSC, the treaty established several supranational bodies: a high authority with executive powers, a council of ministers to safeguard the interests of the member states, a common assembly with advisory authority only, and a court of justice to settle disputes.

Encouraged by this success, the Six pursued integration in the military and political fields. When these efforts were derailed, European leaders decided to continue the unification of Europe on the economic front alone. A historic meeting in Messina, Italy, in June 1955, launched the negotiation of two treaties to establish:

### **2.3. European Economic Community (EEC)**

In 1957 the participants in the ECSC signed two more treaties in Rome. These treaties created the European Atomic Energy Community (Euratom) for the development of peaceful uses of atomic energy and, most important, the European Economic Community (EEC, often referred to as the Common Market).

The EEC treaty provided for the gradual elimination of import duties and quotas on all trade between member nations and for the institution of a common external tariff. Member nations agreed to implement common policies regarding transportation, agriculture, and social insurance, and to permit the free movement of people and funds within the boundaries of the community. One of the most important provisions

of the treaty was that it could not be renounced by just one of the members and that, after a certain amount of time, further community decisions would be made by a majority vote of the member states rather than by unanimous action.

Both the EEC and the Euratom treaties created separate high commissions to oversee their operations. However, it was agreed that the ECSC, EEC, and Euratom would be served by a single council of ministers, representative assembly, and court of justice.

The Six signed the treaties on March 25, 1957, in Rome. Often referred to as the "Rome Treaties," they came into force in January 1958.

In the preliminaries to the 1957 treaties of Rome, other nations were invited to join the EEC. The United Kingdom objected to the loss of control over national policies implied in European integration and attempted to persuade European nations to create a free trade area instead. After the EEC treaty was ratified, the United Kingdom, Norway, Sweden, Denmark, Switzerland, Austria, and Portugal created the European Free Trade Association (EFTA). The EFTA treaty provided only for the elimination of tariffs on industrial products among the member nations. It did not extend to agricultural products, nor did it provide a common external tariff, and members could withdraw at any time. Thus the EFTA was a much weaker union than the Common Market.

In 1961, with the EEC's apparent economic success, the United Kingdom changed its mind and began negotiations toward EEC membership. In January 1963, however, French president Charles de Gaulle vetoed British membership, primarily because of the United Kingdom's close ties to the United States. De Gaulle vetoed British admittance a second time in 1967.

#### **2.4. European Community**

In July 1967 the three organizations (the EEC, the ECSC, and Euratom) fully merged as the European Community (EC). The basic economic features of the EEC treaty were gradually implemented, and in 1968 all tariffs between member states were

eliminated. No progress was made on enlargement of the EC or on any other new proposals; however, until after De Gaulle resigned as president of France in May 1969. The next French president, Georges Pompidou, was more open to new initiatives within the EC.

At Pompidou's suggestion, a meeting of the leaders of the member states was held in The Hague, The Netherlands, in December 1969. This meeting paved the way for the creation of a permanent financing arrangement for the EC based on contributions from the member states; the development of a framework for foreign policy cooperation among the member nations; and the opening of membership negotiations with the United Kingdom, Ireland, Denmark, and Norway.

## **2.5. Expansion of the EC**

In 1972, after nearly two years of negotiations, it was agreed that the four applicant countries would be admitted on January 1, 1973. The United Kingdom, Ireland, and Denmark joined as scheduled; however, in a national referendum, the people of Norway voted against membership.

In the United Kingdom, however, popular opposition to EC membership remained. This opposition was based primarily on the amount of British contributions to the EC budget, which many Britons felt was too high. After the Labor Party regained power in the United Kingdom in 1974, it carried out its election promise to renegotiate British membership conditions in the EC, particularly the financial ones. The renegotiation resulted in only marginal changes. However, the question of whether the United Kingdom would withdraw from the EC and doubts in other countries about the United Kingdom's commitment to Europe added to the existing uncertainty within the community generated by the economic problems of the 1970s. The Labor government endorsed continued EC membership and called a national referendum on the issue for June 1975. Despite strong opposition from some groups, the British people voted for continued membership.

### **3. Membership: Who Can Join the EU?**

Union membership is open to any European country with a stable democratic government, a good human rights record, a properly functioning market economy, and sound macroeconomic policies. Candidates must also have the capacity to fulfill and implement existing EU laws and policies (known as the *acquis communautaire*).

Four enlargements have already taken place: Denmark, Ireland, and the United Kingdom joined the original six European Community members (Belgium, France, Germany, Italy, Luxembourg, Netherlands) in 1973. Greece joined in 1981, followed by Spain and Portugal in 1986. Austria, Finland, and Sweden acceded to the European Union on January 1, 1995. Norway had also negotiated and signed an accession treaty in 1994, but Norwegian voters narrowly rejected membership in a referendum.

Although it was not officially an enlargement, the five Laender of the former German Democratic Republic entered the Union as part of a united Germany on October 3, 1990. The European Union is currently preparing for a fifth enlargement to more than twenty-five member states.

### **4. The Treaties**

The European Union does not have a formal constitution. Instead, the European Union has been built through a series of treaties that represent binding commitments by the member states signing them. Member states negotiate the treaties through intergovernmental conferences, or "IGCs," that culminate in a summit chaired by the member state holding the Council presidency.

#### **4.1. Single European Act (SEA)**

By the 1980s, even though it had existed for more than 30 years, the EC still had not realized the hopes of the most ardent supporters of European unity: a United States of Europe. In fact, despite the removal of internal tariffs, it had not even succeeded in ending all restrictions on trade within the EC, nor in eliminating internal customs

frontiers. The admission of the less-developed Mediterranean countries—Greece in 1981, then Spain and Portugal in 1986—introduced a host of new problems. These related primarily to the weaker economies and lower levels of economic development of these states. In particular, the greater reliance of the Mediterranean countries on agriculture meant that a large percentage of funds the EU earmarked to support agriculture within the community would have to be redirected to the new members. This alarmed countries like Ireland, who feared that their own share of these funds would be reduced.

In 1985 the European Council, composed of the heads of state of the EC members, decided to take the next step toward greater integration. In February 1986 they signed the Single European Act (SEA), a package of amendments and additions to the existing EC treaties. The SEA required that the EC adopt more than 300 measures to remove physical, technical, and fiscal barriers in order to establish a single market, where the economies of the member states would be completely integrated. In addition to this, member states agreed to adopt common policies and standards on matters ranging from taxes and employment to health and the environment. Each member state also resolved to bring its economic and monetary policies in line with those of its neighbors.

#### **4.2. Creation of the European Union**

In the late 1980s, sweeping political changes led the EC once again to increase cooperation and integration. As Communism crumbled in Eastern Europe, many formerly Communist countries looked to the EC for political and economic assistance. The EC agreed to give aid to many of these countries, but decided not to allow them to join the EC immediately. An exception was made for East Germany, which was automatically incorporated into the EC after German reunification.

In the wake of the rapid political upheaval, West Germany and France proposed an intergovernmental conference (IGC) to pursue closer European unity

An IGC is a meeting between members that begins the formal process of changing or amending EC treaties. Another IGC had been established earlier, in 1989, to prepare a timetable and structure for monetary union, in which members of the community would adopt a single currency. British prime minister, Margaret Thatcher opposed calls for increased unity, but in 1990 John Major became prime minister and adopted a more conciliatory approach toward the idea of European unity. The IGCs began work on a series of agreements that became the Treaty on European Union.

#### **4.3. Treaty on European Union**

The Treaty on European Union (often called the Maastricht Treaty) founded the EU and was intended to expand political, economic, and social integration among the member states. After lengthy discussions, it was accepted by the European Council at Maastricht, The Netherlands, in December 1991 and in effect since November 1993, was a major overhaul of the founding treaties. Maastricht provided a blueprint to achieve Economic and Monetary Union (EMU), further developed the Union's inherent political dimension through the new Common Foreign and Security Policy (CFSP), and expanded cooperation in judicial and policing matters.

It committed the EU to Economic and Monetary Union (EMU). Under EMU the member nations would unify their economies and adopt a single currency by 1999. The Maastricht Treaty also set strict criteria that the member states had to meet before they could join EMU. In addition, the treaty created new structures designed to develop a more integrated foreign and security policy and to encourage greater governmental cooperation on judicial and police matters. The member states granted the EU governing bodies more authority in several areas, including the environment, education, health, and consumer protection.

The new treaty aroused a good deal of popular opposition and concern among EU citizens. Many people were worried about EMU, which would replace national currencies with a single European currency. The United Kingdom refused to endorse some elements of the treaty and gained exemptions, called opt-outs, from those

elements. These included not joining EMU and not participating in the Social Chapter, a section of the Maastricht Treaty outlining goals in social and employment policy, including a common code of workers' rights. Danish voters turned down ratification in a referendum, while French voters favored the treaty by only a slim majority. In Germany a challenge to the treaty was lodged with the country's supreme court, saying that membership in the EU violated Germany's constitution. In an emergency meeting of the European Council, Denmark gained substantial concessions and exemptions, including the right to opt out of both EMU and any future common defense policy. Danish voters then approved the treaty in a subsequent referendum. Because of these problems, the EU was not formally inaugurated until November 1993.

The treaty created the "three pillar" European Union that exists today.

**Pillar One** incorporates the three founding treaties now forming the "European Community" and sets out the institutional requirements for EMU. It also provides for expanded Community action in certain areas, such as the environment, research, education, and training.

**Pillar Two** established the Common Foreign and Security Policy (CFSP), which makes it possible for the Union to take joint action in foreign and security affairs.

**Pillar Three** created the Justice and Home Affairs (JHA) policy, dealing with asylum, immigration, judicial cooperation in civil and criminal matters, and customs and police cooperation against terrorism, drug trafficking, and fraud.

The CFSP and JHA operate by intergovernmental cooperation, rather than by the Community institutions that operate Pillar One. Maastricht also created European citizenship and strengthened the European Parliament's legislative role in certain areas.

Standing above the three pillars and in a position to coordinate activities across all of them is the European Council. The council is in strict legal terms not an EU



institution. It is the meeting place of the leaders of the national governments. Its decisions are almost always unanimous but usually require intensive bargaining. The council shapes the integration process and has been responsible for almost all EU developments, including the SEA and the Maastricht and Amsterdam treaties. The European Council has provided the EU with initiatives for further development, agendas in various policy fields, and decisions that it expects the EU to accept. The council's actions illustrate one of the major dilemmas within the EU: how to promote further unity and integration while permitting national governments to retain as much influence as possible over decisions.

#### **4.4. The Treaty of Amsterdam**

Popular reactions against some aspects and consequences of the Maastricht Treaty led to another intergovernmental conference among EU leaders that began in March 1996. This IGC produced the Amsterdam Treaty, which revised the Maastricht Treaty and other founding EU documents. These changes were intended to make the EU more attractive and relevant to ordinary people.

The Amsterdam Treaty called on member nations to cooperate in creating jobs throughout Europe, protecting the environment, improving public health, and safeguarding consumer rights. Additionally, the treaty provided for the removal of barriers to travel and immigration among the EU member states except for the United Kingdom, Ireland, and Denmark, all of which retained their original border controls. The treaty included the potential for cooperation and integration with the Western European Union (WEU), an organization of Western European powers focused on defense. It also allowed the possibility of admitting Eastern European countries to the EU. The Amsterdam Treaty was signed by EU members on October 2, 1997, but took effect in 1999.

Many institutional questions were postponed to the Intergovernmental Conference launched at the Helsinki European Council Summit in December 1999 and resulting in the Treaty of Nice.

#### **4.5. The Treaty of Nice**

The Treaty of Nice, signed in Nice, France, in December 2000, addresses a number of institutional questions remaining after the Treaty of Amsterdam. Most of the institutional aspects of the Treaty of Nice will not take effect until 2005, and the treaty must first be ratified by all fifteen member states.

Under the Treaty of Nice (once ratified), the composition of the College of Commissioners is altered and the powers of the Commission president strengthened. The five largest states give up their right to name a second commissioner in 2005, and new member states will name one commissioner until the EU reaches twenty-seven members. At that point, the total number of commissioners will be set at a lower number, with appointments made by rotation among member states in a manner to be determined by a unanimous Council vote. The president will be selected by the European Council according to the qualified majority voting procedure, rather than by unanimity as pre-Nice. He or she will have greater control of the structure and allocation of responsibilities within the College of Commissioners and can request a commissioner's resignation.

Its' most important purpose is to help prepare the EU institutions for enlargement to as many as twenty-eight member states. Measures in the Treaty of Nice include:

- Extension of qualified majority voting and re-weighting of votes within the Council;
- Extending the use of "enhanced cooperation" to allow groups of at least eight member states to proceed with policy initiatives;
- Redistribution of seats within the European Parliament in preparation for new members; and
- Reconfiguring the College of Commissioners and strengthening the European Commission presidency.

The *Declaration on the Future of the Union*, annexed to the Treaty of Nice, calls for a deeper and wider debate about the future of Europe and the structure of the European Union. This will provide the groundwork for a new Intergovernmental Conference (IGC) to be convened in 2004. The 2004 IGC will consider a number of important issues:

- More clearly defining the competences of the Union and its Member States, based on the principle of subsidiarity;
- Measures to simplify the treaties;
- The role of national parliaments in the European construction; and
- The legal status of the *Charter of Fundamental Rights*.

Through the search for "ever closer union," the European Union has consolidated economic prosperity and democracy in Western Europe and helped bring stability to Central and Eastern Europe. Increasingly, the EU must deal with the challenges of globalization in the twenty-first century. The Treaty of Nice and preparations for the 2004 IGC are important developments, but they should be seen in this broad, evolutionary context.

## **5. Government**

The EU system is inherently evolutionary, adapting to changing political and economic circumstances.

Unlike the United States, the EU is founded on international treaties among sovereign nations rather than a constitution. The power to enact laws that are directly binding on all EU citizens throughout the EU territory also distinguishes the Union from international organizations. This governing system differs from all previous national and international models.

### **5.1. Governing Institutions**

The European Union is governed by five institutions: European Commission, Council of the European Union, European Parliament, European Court of Justice, and European Court of Auditors. In addition, the heads of state and government and the Commission president meet at least twice a year in European Council summits to provide overall strategy and political direction. The European Central Bank is responsible for monetary policy and managing the euro in the Economic and Monetary Union. In addition, there are many smaller bodies in the EU, such as the Economic and Social Committee, and the Committee of the Regions.

These institutions embody the supranational and intergovernmental aspects of the EU.

### **5.2. European Commission**

The European Commission is the highest administrative body in the EU. Unlike the European Council, which oversees all three pillars of the EU, the commission concentrates almost solely on the EC pillar. It initiates, implements, and supervises policy. It is also responsible for the general financial management of the EU and for ensuring that member states adhere to EU decisions. The commission is meant to be the engine of integration, and it spearheaded the preparations for the single market and the moves toward establishing the euro.

The Commission is the policy engine. It proposes legislation, is responsible for administration, and ensures that the provisions of the treaties and the decisions of the institutions are properly implemented. It has investigative powers and can take legal action against persons, companies, or member states that violate EU rules. It manages the budget and represents the Union in international trade negotiations and other issues within its jurisdiction.

Currently there are 20 commissioners, who are appointed by the member governments and are supported by a large administrative staff. The United Kingdom, France, Germany, Italy, and Spain each appoint two commissioners; the other

countries appoint one each. The policy of each member state selecting a commissioner has become an issue with the possibility that the EU will become larger during the next decade. If each country in an enlarged EU were allowed to appoint at least one commissioner, the commission would be much larger, making it too unwieldy to be an effective executive and decision-making authority. In addition, the fact that the commission is appointed by member governments and not elected by the people has raised questions about how much power it should be allowed to exercise. The lack of democratic accountability has become a more important issue with the expansion of EU control into different policy areas and the intention to admit more countries into the EU.

### **5.3. Council of European Union**

The Council of the European Union (formerly called the Council of Ministers) represents national governments. It is the primary decision-making authority of the EU and is the most important and powerful EU body. Although its name is similar to that of the European Council, the Council of the European Union's powers are essentially limited to the EC pillar, whereas the European Council oversees all three pillars of EU cooperation.

When the Council of the European Union meets, 15 government ministers, one from each member state, are present. However, the minister for each state is not the same for every meeting. Each member state sends its government minister who is most familiar with the topic at hand. For example, a council of 15 defense ministers might discuss foreign policy, whereas a council of 15 agriculture ministers would meet to discuss crop prices.

The Council of the European Union adopts proposals and issues instructions to the European Commission. Paradoxically, the council is expected to further EU integration while at the same time protecting the interests of the member states—two goals that are not always compatible. This contradiction will probably become more difficult to reconcile as the EU continues to expand.

Decision making in the council is complex. A few minor questions can be decided by a simple majority. Many issues, however, require what is called *qualified majority voting*, or QMV. In QMV each country has an indivisible bloc of votes roughly proportional to its population. It takes two-thirds of the total number of votes to make a qualified majority. QMV was introduced in some areas to replace the need for a unanimous vote. This has made the decision-making process faster and easier as it prevents any one state from exercising a veto. QMV was extended to more areas by the Single European Act. Many important decisions, however, still require unanimous support.

#### **5.4. European Parliament (EP)**

The European Parliament (EP) is made up of 626 members who are directly elected by the citizens of the EU. Direct elections to the EP were implemented in 1979.

Before that time, members were appointed by the legislatures of the member governments. The president of the Parliament is elected for a two-and-a-half year term. Though they are elected on a national basis, members of the European Parliament (MEPs) form political rather than national groups based on party affiliation. The European Parliament was originally designed merely as an advisory body; however, its right to participate in EU decision making was extended by the later treaties. It must be consulted about matters relating to the EU budget, which it can reject; it can remove the European Commission as a body through a vote of no confidence; and it can veto the accession of member states.

The Parliament acts as the EU's public forum. It can question the Commission and the Council; amend or reject the EU budget; and dismiss the entire Commission through a vote of censure, a power it has never used. However, pressure from the Parliament led to a critical report and the Commission's collective resignation in March 1999. Parliament now also has the power to confirm a newly appointed Commission and to hold hearings on individual Commissioners. It cannot reject individual nominees, only the full Commission. Since Maastricht, Parliament has an appointed ombudsman to address allegations of maladministration in EU institutions and agencies.

The Parliament holds plenary sessions in Strasbourg and Brussels. Its twenty committees, which prepare the work for plenary meetings, and its political groups usually meet in Brussels.

The European Parliament's influence is essentially negative: It can block but rarely initiate legislation, its consultative opinions can be ignored, and it has no power over the Council of the European Union. Its effectiveness is limited by two structural problems: It conducts its business in 11 official languages, with consequent huge translation costs, and it is nomadic, using three sites in different countries for its meetings. Unless changes are made, these weaknesses will most likely intensify as the union grows larger. At the same time, there have been frequent calls for expanding the power of the European Parliament, which would increase the democratic accountability of the EU. The weaknesses of the European Parliament can be remedied, however, only by the national governments.

### **5.5. European Court of Justice (ECJ)**

The European Court of Justice (ECJ) is the judicial arm of the EU. Each member country appoints one judge to the court. The ECJ is responsible for the law that the EU establishes for itself and its member states. It also ensures that other EU institutions and the member states conform with the provisions of EU treaties and legislation. The court has no direct links with national courts and no control over how they apply and interpret national law, but it has established that EU law supersedes national law.

Historically, the ECJ has declared both for and against EU institutions and member states. Its assertion that EU law takes precedence over national law, and the fact that there is no appeal against it, have given the ECJ a powerful role in the EU and have on occasion drawn criticism from both national governments and national courts.

Historically the ECJ had a very high caseload, but this was eased in 1989 when the Court of First Instance was created. This court hears certain categories of cases,

including those brought by EU officials and cases seeking damages. Rulings by the Court of First Instance may be appealed to the ECJ, but only on points of law.

#### **5.6. Court of Auditors**

The Court of Auditors is made up of 15 members, one from each EU member state. The court oversees the finances of the EU and ensures that all financial transactions are carried out according to the EU budget and laws. The court issues a yearly report to the Council of the European Union and the European Parliament detailing its findings.

#### **5.7. European Central Bank (ECB)**

The European Central Bank (ECB) began operations in 1998. It is overseen by a six-member executive board that is chosen by agreement of the EU member governments and includes the ECB president and vice president. The ECB has exclusive authority for EU monetary policy, including such things as setting interest rates and regulating the money supply. In addition, the ECB played and continues to play a major role in overseeing the inauguration and consolidation of the euro as the single EU currency. Its authority over monetary policy and its independence from other EU institutions make the ECB a very powerful body. There are misgivings that the ECB has been given too much independence, leading to a debate over whether it should be subject to political direction.

#### **5.8. Other Bodies**

Other important bodies in the EU include the Economic and Social Committee and the Committee of the Regions. The Economic and Social Committee is a 222-member advisory body drawn from national interest groups of employers, trade unions, and other occupational groups. It must be consulted by the European Commission and the Council of the European Union on issues dealing with economic and social welfare. The Committee of the Regions, also with 222 members, was formed in 1994 as a forum for representatives of regional and local governments. It was intended to



strengthen the democratic credentials of the EU, but it has only a consultative and advisory role.

## **6. Monetary Union**

### **6.1. European Investment Bank**

The European Investment Bank (EIB) was established in 1957 under the Rome treaty that created the EEC. Its primary focus is on regional development, employment, and environmental modernization. The member states contribute to its capital, but it raises most of its funds on international markets. Some 8 percent of its budget goes to projects outside the EU. The bank only offers loans, not grants, and its contribution must be matched by an equivalent outlay from other sources. The EIB is an autonomous body able to make its own operational decisions free of political direction, within the general legal framework of the EU. It has been one of the most successful EU bodies. Since 1993 its annual lending volume has been greater than that of the International Bank for Reconstruction and Development (the World Bank).

The EU's attempts to establish a single European currency, as set out in the Maastricht Treaty, were controversial from the start. For instance, some EU countries, including the United Kingdom, worried that a shared European currency would threaten their national identity and governmental authority. Despite their concerns, many of the EU's member countries struggled to meet the economic requirements for participating in a shared currency.

These requirements were stringent: (1) a country's rate of inflation could not be more than 1.5 percent higher than an average of the rate in the three countries with the lowest inflation; (2) a country's budget deficit could not exceed 3 percent of gross domestic product (GDP), and its government debt could not exceed 60 percent of GDP; (3) a country's long-term interest rate could not be more than 2 percent higher than an average of the rate in the three countries with the lowest interest rates; (4) a country could not have devalued its currency against any other member nation's for at least two years prior to EMU.

Most countries found it very difficult to meet all these criteria. Measures to reduce inflation and high interest rates contributed to increasing unemployment, while efforts to control government deficits often led to increased taxation. These consequences compounded the problems of economic recession that most countries were already experiencing.

As the deadline for EMU approached, misgivings arose from many quarters that the economic climate was not right, that levels of economic performance across the countries were still too disparate, and that several countries had not strictly met the Maastricht criteria. However, the EU officially agreed in May 1998 to adopt a single European currency "the EURO" for 11 of the 15 member countries beginning on January 1, 1999. This agreement also created the European Central Bank (ECB) to oversee the new currency and to take charge of the monetary policies of the EU.

The economic success of EMU depends on whether the euro is accepted in the international markets as a stable and strong currency and the extent to which it leads to a greater convergence of national economies and greater mobility of production, goods, and services within the EU. It is not clear whether EMU has a sufficiently firm foundation for these goals to be achieved. However, many EMU supporters find the debates about the economic costs and benefits less important than the belief that EMU, even if economically flawed, is a big step toward political integration.

## **6.2. The Euro**

Several decades in the making, the euro required much planning and political commitment to become a reality. The introduction of the euro began the third stage and the final transition to full Economic and Monetary Union (EMU), a process that was launched in 1990 as EU member states prepared for the 1992 single market. Aimed at boosting cross-border business activity, the first stage of EMU lifted restrictions on movements of capital across internal EU borders (July 1, 1990). Stage two, which began in January 1994, set up the European Monetary Institute (EMI) in Frankfurt to pave the way for the European Central Bank (ECB) in the same location.

The euro zone is roughly comparable in economic weight to the United States. The population of the twelve member states participating in EMU is about 290 million, and the euro zone accounts for more than 21 percent of world GDP. In 2000, euro zone exports amounted to 14.7 percent of world exports, with the comparable figure for euro zone imports at 13 percent. Beyond its economic impact, the euro has substantial political significance and adds to the EU's capabilities as an international actor.

The countries that adopted the euro were **Austria, Belgium, Finland, France, Germany, Ireland, Italy, Luxembourg, The Netherlands, Portugal, and Spain.**

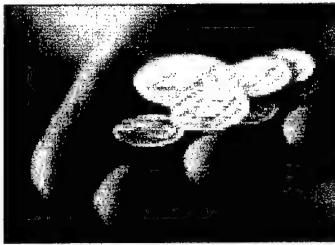
The United Kingdom, Sweden, and Denmark met the economic criteria to join in the adoption of the euro but decided not to participate. Greece had hoped to be included in the first wave of countries to adopt the euro but did not meet the criteria. On January 1, 1999, the 11 nations began to use the euro for accounting purposes and electronic money transfers, while continuing to use their national currencies for other uses. Greece adopted the euro in January 2001, becoming the 12th member of the euro zone. In 2002 the ECB began issuing euro-denominated coins and banknotes, and the currency of countries that adopted the euro ceased to be legal tender.

Preparatory steps taken since January 1, 1999 included:

- Fixing the conversion rate of the participating currencies to the euro irrevocably;
- Having all operations of the European Central Bank in euros;
- Having wholesale financial and capital markets use the euro;
- Denominating all public debt in euros;
- Denominating private bank accounts in euros;
- Making euro-denominated credit cards available and making payments in euros possible on existing credit cards;

- Having public administrations in the euro countries allow companies to use the euro for accounting purposes, tax payments, and in some cases, social security payments;
- Dual pricing (in national currencies and euros) to help the general public adapt to the euro.

## COINS



There are 8 euro coins denominated in 2 and 1 euro, then 50, 20, 10, 5, 2 and 1 cents. Every euro coin will carry a common European face. On the obverse, each Member State will decorate the coins with their own motifs. **No matter which motif is on the coins they can be used**

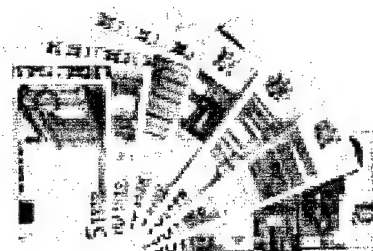
**anywhere inside the 12 Member States. For example, a French citizen will be able to buy a hot dog in Berlin using a euro coin carrying the imprint of the King of Spain.**

The common European face of the coins represents a map of the European Union against a background of transverse lines to which are attached the stars of the European flag. The 1, 2 and 5 cent coins put emphasis on Europe's place in the world while the 10, 20 and 50 present the Union as a gathering of nations. The 1 and 2 euro coins depict Europe without frontiers. Final designs were agreed at the European Council meeting in Amsterdam in June 1997.

**Availability:** Coins can be obtained from 1 January 2002 from banks and at retail outlets. In some Member States mini-kits will be made available in advance.

## NOTES

There are 7 euro notes. In different colors and sizes they are denominated in 500, 200, 100, 50, 20, 10 and 5 euros. The notes will be uniform throughout the euro area; unlike coins, they will have no national side. The designs are symbolic for Europe's architectural heritage. They do



not represent any existing monuments. Windows and gateways dominate the front side of each banknote as symbols of the spirit of openness and cooperation in the EU. The reverse side of each banknote features a bridge from a particular age, a metaphor for communication among the people of Europe and between Europe and the rest of the world. Final designs were announced in December 1996 at the Dublin, European Council. All notes will carry advanced security features. All euro notes are legal tender in all countries of the euro area.

**Availability:** Notes can be obtained from 1 January 2002 from bank cash machines and at the banking counter. Big retailers will also be giving them back as change after a purchase has been made with old currency. Many people are expected to find it more convenient to use credit and cash cards in the first few days of January 2002. By 28 February 2002 at the latest, old notes and coins will be withdrawn from circulation.

EMU supports the ideas of Robert Schuman and Jean Monnet that the way to political union is through economics. It has also reinforced the central role of France and Germany in the EU. The reunified Germany was much larger, reawakening French concerns and their desire to influence German economic policy. At the same time, Germany wanted to allay fears of a militaristic German nationalism. Much the same as in 1950, when the European Coal and Steel Community was created, both governments believed that these political problems could be resolved through economic integration. These concerns underpinned a more widespread belief that economic and political benefits will quickly outweigh the initial costs of switching to a single currency whose stability has still to be proven.

### **What Does the Euro Mean?**

The euro means stability. Member states participating in EMU are legally bound to continue the fiscal discipline required by the Maastricht Treaty to qualify for EMU. This is the purpose of the Stability and Growth Pact, agreed to by EU heads of state and government in July 1997, under which sanctions can be brought against member states that do not comply with strict guidelines for managing public finances.

The euro consolidates and extends Europe's single market. By removing transaction costs and completely eliminating currency transactions in the euro zone, trade and investment are greatly facilitated.

The euro creates new opportunities in the financial sector. The market capitalization of stocks traded in a country or region divided by that region's GDP is a common indicator of the importance and size of an equity market. The euro area's ratio of market capitalization to GDP gained significantly in the 1990s. From 1990 to 1995, the ratio hovered around 25 percent and was remarkably lower than that in Japan or the United States. However, by 2000, the overall growth in the euro area's stock market resulted in an increase in this ratio to 89 percent, topping Japan's 68 percent.

The euro is likely to become a major reserve currency. According to some estimates, the euro could account for 25 percent or more of global foreign exchange reserves in the medium term. This should help the EU and the United States share the burden of global financial stability, particularly in the wake of an economic downturn. The European Central Bank moved to reassure world markets following the September 11, 2001, terrorist attacks in the United States, and subsequently cooperated with the US Federal Reserve and other central banks to ensure sufficient liquidity for market and other economic transactions.

Like any other currency in the floating exchange rate system, the dollar to euro exchange rate fluctuates, reflecting perceptions about economic growth prospects. The dollar to euro exchange rate averaged \$0.90 in 2001 and \$0.92 for 2000.

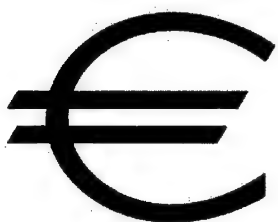
### **The Euro and the Single Market**

The euro is the logical complement to Europe's single market, which was largely completed in 1992 following the Single European Act (SEA) of 1986. The SEA facilitated the adoption of a package of nearly 300 "internal market" directives set forth in a 1985 Commission White Paper and designed to achieve the "four freedoms": freedom of movement for goods, capital, people, and services among the member countries.

For most commercial purposes, there is now one frontier instead of fifteen; standards, testing, and certification procedures are either uniform or equivalent; and significant economies of scale are attainable in a market of over 370 million consumers. The combination of economic liberalization and monetary integration boosts the competitiveness of European companies while making it easier and cheaper for non-EU companies to do business in Europe.

Almost all of the legislation required for completing the 1992 single market has been enacted. However, due to some implementation delays in a small number of areas, the Commission launched an Action Plan to ensure that member states and private sector operators meet their obligations under EU single market rules.

The single market benefits European and foreign companies alike. Special efforts were made to ensure that the program was fully transparent and accessible to American business and the US authorities. Foreign companies, especially from the United States

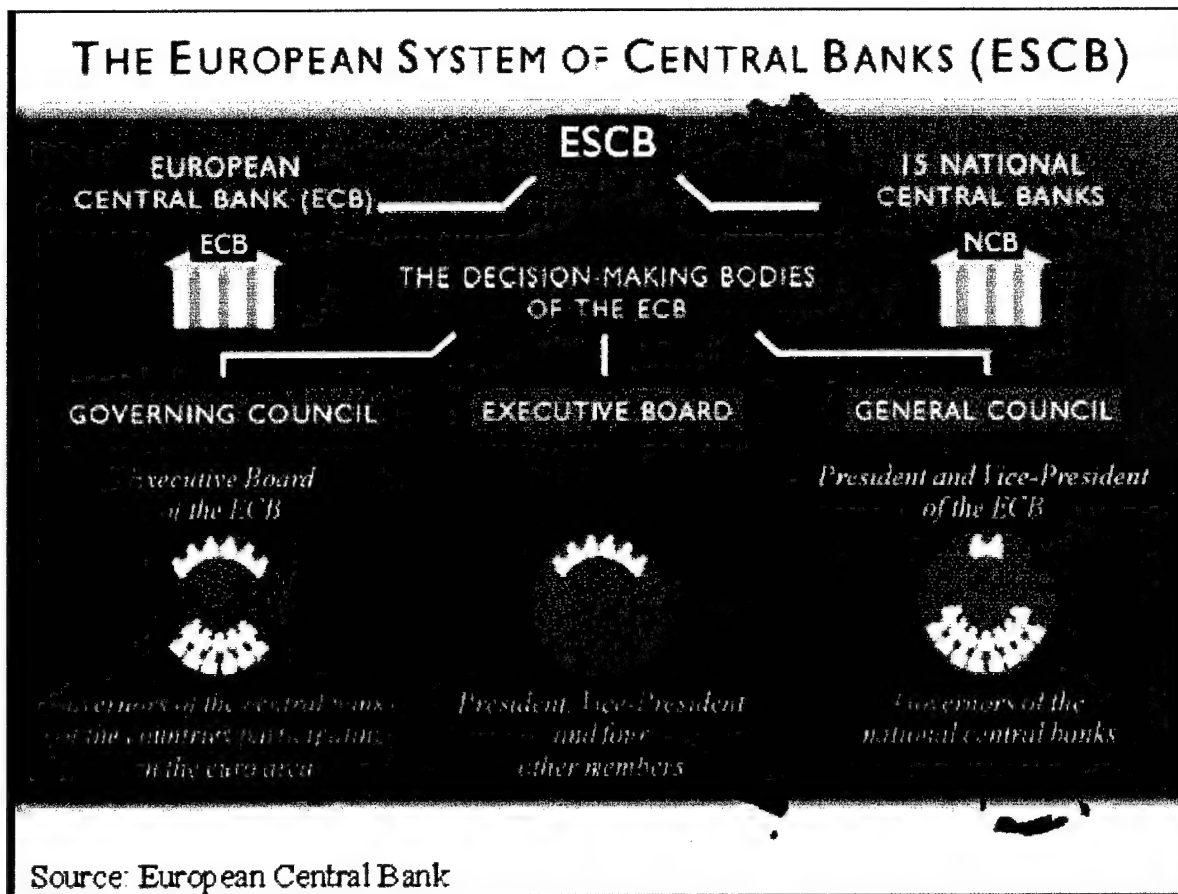


and Japan, positioned themselves to take advantage of the single market. They have increased their direct investment and entered into joint ventures with European partners.

The graphic symbol for the euro (above) looks like an E with two clearly marked, horizontal, parallel lines across it.

It was inspired by the Greek letter epsilon, in reference to the cradle of European civilization and to the first letter of the word "Europe." The parallel lines represent the stability of the euro.

The official abbreviation for the euro is "EUR." It has been registered with the International Standards Organization (ISO) and is used for all business, financial, and commercial purposes.



### **European System of Central Banks (ESCB) and the European Central Bank (ECB)**

Monetary policy in the euro area is defined and implemented by the European System of Central Banks, which comprises the Central Banks of the euro countries, and the independent European Central Bank, which was inaugurated in Frankfurt on June 1, 1998, and became operational on January 1, 1999.

The ESCB also conducts foreign exchange operations, holds and manages the official foreign reserves of the participating member states, and promotes the smooth operation of payment systems.

The European Central Bank is headed by a president, a vice president, and four other members of the Executive Board, appointed by agreement among EU heads of state and government. Wim Duisenberg, a former central banker from the Netherlands, was appointed ECB president in May 1998 for a term of eight years. The president, together



with the other members of the Executive Board, is responsible for the day-to-day running of the ECB, in accordance with the guidelines of a Governing Council. The Governing Council is made up of the ECB's Executive Board and the governors of the national central banks.

### **EU Countries Not in the Euro Zone**

The currencies of the member states currently not in EMU (Denmark, Sweden, and the United Kingdom) have the opportunity to be linked to the euro under a successor to the former Exchange Rate Mechanism (ERM). The original ERM established bilateral conversion rates between the national currencies and in relation to the European Currency Unit (ecu), the forerunner of the euro. The new ERM ensures close monetary relations among participating member states and the euro zone.

### **Accountability**

The adoption of the euro led to greater integration and cooperation among EU members. One result was a growing concern on the part of EU citizens and some members of the EU government that the major EU institutions were not sufficiently democratic or accountable. This was especially true of the European Commission. As the power of the EU grew, so did concerns that the commission exercised too much control with too little oversight. At the same time, there were also worries that the one democratically elected institution of the EU, the European Parliament, had very little power.

This issue came to a head in 1999, when a report prepared by independent auditors at the request of the European Parliament cited multiple examples of mismanagement on the part of the commission. The report accused several commissioners of corruption, cronyism, and poor oversight over programs under their control. After the report was released, the entire European Commission resigned, something that had never happened before. The sudden resignations caused a great deal of confusion in the short term, but experts generally considered the report and its consequences to be an important step by the European Parliament toward increasing the democratic accountability of the EU governing bodies.

## **The Euro and Applicant Countries**

Even though accession to the EU entails acceptance of the objective of EMU, compliance with the "convergence criteria" is not a precondition for EU membership. New countries are likely to join the EU before they qualify for EMU membership. Since the "convergence criteria" are signposts of a macroeconomic policy geared to achieving stability, however, all new member states will be expected to move toward them on a permanent basis.

## **7. Important Features and Policies of the EU**

One of the major goals of the EU has been to establish a single market in which the economies of all the EU members are unified. The EU has sought to meet this objective in three ways: by defining a common commercial policy, by reducing economic differences among its richer and poorer members, and by stabilizing the currencies of its members.

The 1957 Rome treaties obliged the EU to adopt a common commercial policy. The EU adopted several common policies, the main ones being the Common Agricultural Policy (CAP) and the Common Fisheries Policy (CFP). By 1968 the EU had also created a customs union in which all tariffs and duties among members were eliminated. Finally, members had defined uniform commercial practices for trade with nonmember states.

The EU has attempted to address regional economic differences through agencies such as the European Social Fund, the European Regional Development Fund, the Cohesion Fund, and the European Investment Bank (EIB). These agencies provide money through loans or grants to further economic development in the poorer areas of the EU.

Finally, the EU attempted to stabilize the currencies of its members with the European Monetary System (EMS). The EMS was prompted not only by the desire for a single market, but also by international economic problems and fluctuations in exchange rates. These problems also convinced the EU of the importance of Economic and Monetary

Union (EMU), in which both the economies and the currencies of the members would be unified.

### **7.1. Common Policies**

#### **Agriculture**

The Common Agricultural Policy (CAP) was established by the 1957 Rome treaty that created the European Economic Community. The policy reflected the contemporary belief in the economic importance of agriculture. Memories of the economic hardships that followed the two world wars led the EEC founders to believe that member states should be able to feed their populations from their own resources.

The CAP was intended to stabilize agricultural markets, improve productivity, and ensure a fair deal for both farmers and consumers. It has three major elements: a single market for agricultural products with a system of common prices to producers across the EU; preference for EU producers through a common levy on all agricultural imports from abroad; and shared financial responsibility for guaranteeing prices.

#### **Common Fisheries**

The other major common policy is the Common Fisheries Policy (CFP) of 1982. It imposed controls on access to fish stocks and attempted to preserve the fisheries. CFP set up a structure of price and compensation systems modeled on the CAP. The CFP has successfully limited over-fishing in EU waters, but national fishing industries have objected to its system of fixing prices and allocating to each country strict quotas on the amount of each fish species that can be caught.

### **8. Culture**

One of Europe's greatest assets is its cultural diversity, which will never become an area for harmonization among the member states. The Maastricht Treaty gave the EU a role to play in bringing "the common cultural heritage to the fore" while respecting national and

regional diversity. The completion of the single market, however, does require some measures related to creative endeavor, particularly as regards cross-frontier television, copyright, and the free movement of cultural goods and services.

## **9. Relations With the Rest of the World**

One of the major objectives of the European Union is to speak with one voice and to have a single policy position on world issues. This has been easier to achieve in economics and trade than on political problems. Bilateral and multilateral trade agreements have been signed between the EU and most developing countries. Common political positions, however, have been hindered by conflicts between national interests. EU ambassadors in foreign capitals and at the United Nations collaborate closely, and EU member states develop common foreign policy statements.

However, this collaboration has not always resulted in common action. EU countries were divided over the 1991 Persian Gulf War, the post-1991 crises in the former Yugoslavia, and future relations with Russia and Eastern Europe. In each instance, differences arose between members over how and to what extent the EU should become involved in foreign policy problems, and what the results of any EU action would be for members' economies and political relationships.

### **9.1. EU Relations with the United States**

Transatlantic relations encompass more than EU-US relations. North America and many EU countries provide for their common security in the North Atlantic Treaty Organization (NATO). The US also maintains strong political, economic, and cultural relations with many individual European nations, both within the European Union and elsewhere. Business and economic ties linking the two continents are extremely strong, and there are innumerable other nongovernmental organizations linking people and institutions on both sides of the Atlantic.

However, the US increasingly turns to the EU as a partner to share the burdens of world leadership. This is partly because of the emergence of the EU as a more

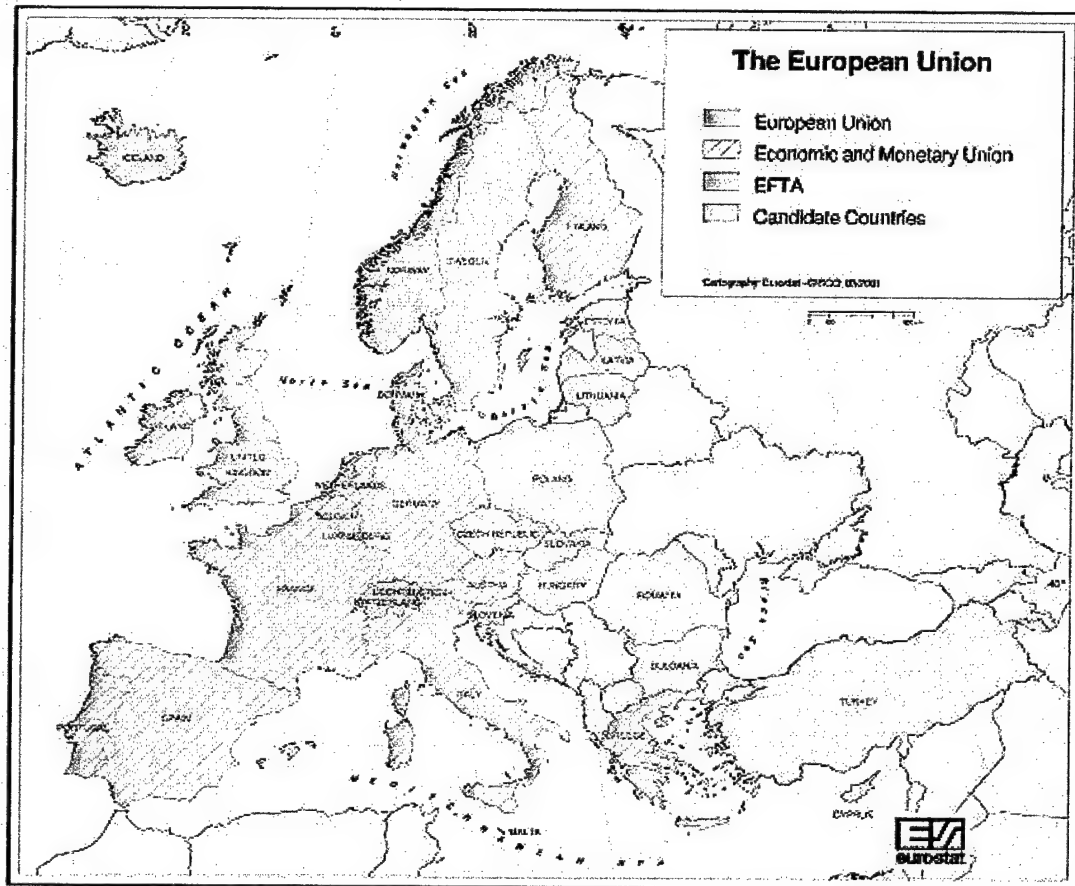
significant political and economic global actor and partly because of diminishing preoccupation on both sides with the overarching security threat that bound Europe and the United States together so strongly during the cold war.

This new geopolitical environment led to changes in the nature of EU-US relations. The 1990 Transatlantic Declaration formally defined EU-US relations immediately after the collapse of Communism in Central and Eastern Europe. The 1995 New Transatlantic Agenda (NTA) and Joint Action Plan stepped up this relationship from consultation to joint EU-US action as the basis for partnership in addressing a very wide range of regional and world issues.

The next era of transatlantic relations will be shaped by the ability of the EU to assume the broad range of responsibilities that come with playing a more active global role and by the willingness of the US to accept the EU as a full partner in dealing with issues that extend beyond the international economy.

## **9.2. Neighboring Countries**

As new member countries joined in the seventies, eighties, and nineties, the European Union grew from six to fifteen member countries in its first four decades. Looking ahead, the Union expects to grow to nearly thirty member countries in the next few years and will include more than a half-billion people. For the first time in history, nearly all the people of Europe will be joined in a single Union by free and democratic consent. The European Union is also forging stronger relations with its neighbors to the east, west, and south, whether or not they will eventually join the Union. The goal is to improve prosperity, political stability, security, and respect for democracy, the rule of law, and human rights in the European region as a whole. The final architecture of Europe is not yet set, nor is the European Union the only entity helping to shape the new Europe. But the EU plays a pivotal role in shaping post-cold war Europe. As it continues to deepen and widen, the Union will likely play an ever more prominent role on the continent in the twenty-first century.



## 10. Future Enlargement

In March 1998 the EU opened talks on full membership with six countries: Cyprus, the Czech Republic, Estonia, Hungary, Poland, and Slovenia. Two years later, in February 2000, negotiations began with six other applicant countries: Bulgaria, Latvia, Lithuania, Malta, Romania, and Slovakia. At the Helsinki European Council in December 1999, when this decision was made, it was also decided to grant Turkey full candidate status. Joining a highly integrated Union is inherently complex, and most of the applicant countries must continue to make far-reaching economic, political, and social adjustments following the end of Communism. Negotiations with each applicant proceed on their own merits and as quickly as possible. The EU hopes to conclude negotiations with a first wave of candidate countries by 2003, with a view to their full membership in the Union in time for the next elections to the European Parliament in June 2004. The accession

treaties with each candidate country must be ratified in the country concerned and in each of the current fifteen EU member states.

Agenda 2000 reinforced the pre-accession strategy under which candidate countries receive increased aid, participate in certain EU programs, and adapt to EU procedures in anticipation of membership. EU and member state aid to Central and Eastern Europe alone totaled \$85 billion for the period 1990-1999. In today's dollars, this is approximately equivalent to the \$13.2 billion in US Marshall Plan aid for the reconstruction of Europe after World War II.

In July 1997, the Commission completed an exhaustive review of the state of readiness of the applicant countries for full membership, publishing its findings in a three-volume report, known as *Agenda 2000: For a Stronger and Wider Union*. The Commission concluded that none of the ten Central and East European applicants was ready for full membership under criteria adopted at the 1993 Copenhagen European Council, but five were sufficiently advanced along the path to open negotiations. In addition, Cyprus was offered negotiations in this round.

The purpose of Agenda 2000 was twofold: to prepare the candidate countries for membership and to prepare the EU and its institutions for the biggest and most challenging enlargement in its history. After two years of intensive debate, EU leaders meeting in Berlin in March 1999 approved the Agenda 2000 strategy. This includes reforms of the Common Agricultural Policy (CAP), the Structural Funds, the EU decision-making procedures, and a financial package totaling \$230 billion for the years 2000-2006 for the Central and East European applicants in preparation for the enlargement. Pre-accession financial assistance to Cyprus and Malta extends through 2004.

#### **10.1. Cyprus, Malta, and Turkey**

Negotiations with Cyprus for EU membership began in March 1998, along with negotiations for five countries from Central and Eastern Europe. The European Council had decided in 1995 that the next phase of EU enlargement would include

Cyprus and Malta. The EU would like representatives of both communities in Cyprus to take part in the accession negotiations and hopes that the negotiations will contribute to efforts under United Nations auspices to resolve the dispute dividing the island.

Although the EU has decided that Turkey does not yet meet all the criteria for full membership of the Union, it has frequently reaffirmed Turkey's eligibility for EU membership. Turkey applied for full membership in 1987. But the Commission recommended an alternate path, including steadily closer economic relations—a strategy that both sides are implementing. Since 1995, the EU and Turkey have been joined in a customs union that provides for enhanced economic cooperation. Pre-accession financial assistance, comparable to that available to other candidate countries, is being provided to Turkey. In August 1999, following a devastating earthquake in Turkey, the EU responded immediately with humanitarian assistance.

At the December 1999 Helsinki European Council, Turkey was declared a candidate on the same terms as the twelve other applicants. An Accession Partnership with Turkey was adopted in March 2001. As a candidate country, Turkey benefits from a pre-accession strategy and partnership with the EU that aims to stimulate and support its political and economic reforms. A closer political dialogue with the Union is sought as well. The timing of Turkey's accession, including its passage to the negotiation stage, depends upon its progress toward meeting the membership criteria, which are equally stringent for all candidate nations.

## **10.2. Norway and Switzerland**

In referenda, Norway decided against EU membership in 1973 and 1994. Switzerland has applied for EU membership in the past, though not actively pursued it. One day perhaps both may reactivate their applications.



## **11. European Economic Area (EEA)**

Special arrangements are in force for West European countries outside the Union. The European Economic Area (EEA) extends the EU single market to members of the European Free Trade Association (EFTA) . Created in 1994, the EEA is a single market of the EU and three European Free Trade Association countries. The EU and EFTA act separately in cases concerning anti-dumping and trade sanctions and in international trade negotiations.

EEA members share the EU's single market legislation for the removal of physical, technical, and fiscal barriers to trade and abide by EU legislation in such fields as competition policy (antitrust, mergers, public procurement, and state aids), company law, consumer protection, environment, research and development, education, social policy, mutual recognition of professional qualifications, and contributions to EU structural funds.

EFTA was formed in 1960. The EEA included six of its member countries, three of which joined the EU as full members in 1995. EFTA's remaining members are Iceland, Liechtenstein, Norway, and Switzerland. In a 1992 referendum, Switzerland decided not to join the EEA.

## **12. The Mediterranean and the Middle East**

The European Union drew up a comprehensive Mediterranean strategy at a major conference with its southern neighbors in Barcelona in November 1995. This strategy supports the Mediterranean countries in their efforts to transform the region into an area of peace, stability, democracy, and prosperity and also seeks to create a Euro-Mediterranean free trade area by 2010. The Union committed over \$5 billion in 1995-1999 for economic development in the Mediterranean region, with lending of the same magnitude provided by the European Investment Bank (EIB).

The Euro-Arab Dialogue launched in 1975 covered such areas as technology transfer, investment incentives, trade cooperation, agricultural development, labor problems, and

cultural exchanges. More recently, the EU-Gulf Cooperation Council (GCC) Joint Councils have furthered EU cooperation with the Arab states of the Gulf. The EU is also the largest donor to the Middle East peace process. From 1994 to 1998, the EU and its member states provided \$2.3 billion in aid and technical assistance to the Palestinian Authority and the United Nations Relief and Works Agency. In 2000, EU imports from the Near and Middle East totaled \$47.7 billion, versus \$34.1 billion for the US, while EU exports to the Near and Middle East totaled \$54.4 billion, versus \$19.2 billion for the US.

### **Mediterranean and Middle East Countries**

#### **Euro-Mediterranean Partnership**

Algeria  
Cyprus\*  
Egypt  
Israel  
Jordan  
Lebanon  
Libya (observer status)  
Malta\*  
Morocco  
Palestinian Authority  
Syria  
Tunisia  
Turkey\*

#### **Gulf Cooperation Council (GCC)**

Bahrain  
Kuwait  
Oman  
Qatar  
Saudi Arabia  
United Arab Emirates

\*Applicant Countries for EU Membership

### **13. EU Expansion**

By 1995 all the former Communist countries of Eastern Europe had applied for EU membership. The EU, however, was concerned about the stability of democratic institutions in these countries and their transition to market economies. The countries of Eastern Europe had less developed economies than those of Western Europe, which

would make the incorporation of the former into the EU difficult. Expansion would require a significant reevaluation of EU programs—especially the CAP—and distribution of EU resources. The richer member states worried that they would have to pay more into EU funds, while the poorer member states feared that their share of EU funding for agriculture and regional development would be drastically reduced.

Despite these worries, in 1997 the EU agreed that the political and economic situations in the Czech Republic, Estonia, Hungary, Poland, and Slovenia were such that negotiations on membership could begin, with EU membership coming sometime after 2000. The other Eastern European applications were put on indefinite hold. However, trade between East and West picked up substantially after 1990, as Western nations began to invest in Eastern Europe and the EU provided aid to these countries. The EU and individual countries formed joint ventures and signed formal agreements calling for political and cultural cooperation. The EU also agreed in 1998 to begin membership negotiations with Cyprus; at the same time it suspended the application from Turkey due to concerns over the country's human rights record and strong opposition from Greece.

#### **14. The EU and Non-European Nations**

Relations between the EU and the non-European industrialized countries, especially the United States and Japan, have been both rewarding and frustrating. The EU follows a protectionist policy, especially with respect to agriculture, which on occasion has led the United States in particular to adopt retaliatory measures. In general, however, relations have been positive. The United States and Japan are the largest markets outside Europe for EU products and are also the largest non-European suppliers.

The EU has been less protectionist when dealing with developing countries, which receive more than one-third of its exports. By the mid-1990s all underdeveloped countries could export industrial products to EU nations duty free; many agricultural products that competed directly with those of the EU could also enter duty free. In addition, the EU has reached special agreements with many countries in Africa, the Caribbean, and the Pacific (the so-called ACP countries). In 1963 it signed a convention

in Yaoundé, Cameroon, offering commercial, technical, and financial cooperation to 18 African countries, mostly former French and Belgian colonies. In 1975 it signed a convention in Lomé, Togo, with 46 ACP countries, granting them free access to the EU for virtually all of their products, as well as providing industrial and financial aid. The Lomé convention was renewed and extended to a total of 58 countries in 1979; to 65 in 1984; and to 69 in 1989. The EU has also concluded similar agreements with all the Mediterranean states except Libya, as well as other countries in Latin America and Asia.

## **15. Construction In the EU**

The construction industry in the European Union has attempted to implement standard guidelines to be used by all contractors. These guidelines include standard specifications, standard materials, standard procedures including safety, quality control and environmental control.

The following guidelines can be found on [www.europa.eu.int](http://www.europa.eu.int) under the construction enterprise section. This website gives specific details on construction regulations set forth in the EU.

Availability of harmonized technical specifications.

### ► **Guidance Paper J.**

Transitional Arrangements Under The Construction Products Directive. Issued following consultation of the Standing Committee on Construction at the 49th meeting on 28/29 March 2000, as document CONSTRUCT 99/382 Rev.1 Updated April 2001 following changes to publication procedure.

### ► **Summary list of references to harmonized standards**

The information contained in the summary list is a compilation of the references of standards which have been published in the Official Journal of the European Communities. Although the list is updated regularly, it may not be complete and does not have any legal validity; only publication in the Official Journal produces legal affect.

### ► **Summary list of references to ETA Guidelines**

The information contained in the summary list is a compilation of the references of ETA Guidelines which have been published in the Official Journal of the European Communities. Although the list is updated regularly, it may not be complete and does not have any legal validity.

### ► **New Approach Directives - Reference list**

Overview of the references to harmonized standards with respective Directives.

### ► **The CEN Construction Sector Network.**

Site dedicated to the activities of CEN in relation to the Construction Products Directive and construction in general. This site includes a regularly updated Progress Report of the candidate Harmonized Standards.

## **Legislation on substances in construction products.**

### ► **Legislation ordered by substance**

### ► **Legislation ordered by Country**

GUIDANCE PAPER H calls for setting up a database with information about dangerous substances and applicable national and EU legislation.

This database is designed to help technical specifications writers (CEN and EOTA) to identify all the regulations which exist in Member States applicable to "dangerous substances" present in products or families of products covered by the harmonized technical specification.

The database can also be useful for manufacturers on the application of the harmonized technical specifications.

All the information included in the database has been provided by the regulators of the countries involved. The European Commission (DG Enterprise Construction) maintains the database and publishes its content on the net. This publication is aiming at making it as user friendly and accessible as possible.

Our goal is to keep this information up-to-date and accurate as possible. If errors are brought to our attention, we will try to correct them. All interested parties are asked to continuously give their comments on the content of the database.

Comments concerning the database can be addressed to [construction@cec.eu.int](mailto:construction@cec.eu.int).

**CE Marking: the most solid system around...is guaranteed by:**

**High quality European technical specifications**

- Covering all relevant product regulations in Europe

**Notified Bodies (Third parties) which are**

- Assessed by the Member State on basis of Annex 4 of the CPD, Guidance Paper A, Guidance Paper K
- Under continuous surveillance of the Member State

- Active in the Group of Notified Bodies
- Market surveillance by the Member State

**The Interpretative documents (standardized processes):**

- ▶ **General Introduction to the Interpretative documents.**
- ▶ **Interpretative document No. 1: Mechanical resistance and stability.**
- ▶ **Interpretative document No. 2 : Safety in case of fire.**
- ▶ **Interpretative document No. 3 : Hygiene, health and the environment.**
- ▶ **Interpretative document No. 4 : Safety in use.**
- ▶ **Interpretative document No. 5 : Protection against noise.**
- ▶ **Interpretative document No. 6 : Energy economy and heat retention.**

Two entities exist that help the EU regulate these guidelines:

**(1) European International Contractors (EIC)** - As a professional association, EIC represents the interests of the European construction industry in all questions related to international construction activity. In order to fulfill this task, EIC is in constant contact with all relevant European and international organizations with the aim to foster the improvement of the legal and economical environment for international construction. In this connection, the most prominent topics to be dealt with today on a priority basis are: international contract and tender conditions, questions related to international financing, including BOT schemes, export credit insurance issues and the identification and elimination of market access barriers outside the European Union. Incidentally, EIC provides a unique Forum for European international contractors to meet and exchange experience about their international construction business.

**(2) European Construction Industry Federation (FIEC)** - speaks for the European construction industry in the context of the European harmonization and integration process, is in close contact with the institutions of the European Union

EIC is a legally independent federation which co-operate closely with FIEC, the European Construction Industry Federation. EIC and FIEC carry out complementary tasks. While FIEC, which speaks for the European construction industry in the context of

the European harmonization and integration process, is in close contact with the institutions of the European Union, the activity of EIC aims primarily at improving the international environment for European international contractors. For this purpose EIC maintains relations with international and other organizations, the activity of which is of importance for construction abroad.

#### **16. Summary of Background (Appendix A) Will there ever be a United States of Europe?**

That is a question that remains to be seen. The Union between the member states has certainly developed a lot since the 1950's. Its membership has grown to 15 countries, and may increase to 21 or more by 2010. It has developed a common body of law, common policies and practices, and a great deal of cooperation among its members. Progress, however, has not been consistent. This uneven progress is in part due to two unresolved debates that potential enlargement into Eastern Europe has brought closer together. The first is whether to give priority to "deepening" or "widening," that is, whether to concentrate upon integrating the existing members further, or to welcome new members so that all can have an input into the kind of Europe they want. In addition to the six countries with whom the EU has agreed to negotiate, a further seven have also applied for membership. The second issue is "supranationalism" versus "intergovernmentalism". Despite acceptance of the supranational principle, national governments have been reluctant to cede all control over policy areas to EU institutions. The result was the three EU pillars, since countries did not wish to give up control in politically sensitive areas such as foreign policy and judicial affairs.

The most immediate challenge the EU faces is to make a success of the euro, but the future of the single currency rests in part upon how acceptable it proves to world financial institutions and markets. In the long term, enlarging the EU by including Eastern Europe should improve economic prospects by extending the single market and stimulating economic growth and trade. The EU hopes that enlargement will raise the EU's standing as the major European voice in world affairs and contribute to security and stability on the Continent.

The EU stands to be another world leader, sharing the burdens of world peace. It also holds the key to a large single market that could dramatically affect world trade. But as always, the union is still in the process of being formed. Only time will tell what will happen.



**APPENDIX B**  
**CONSTRUCTION PRODUCTS DIRECTIVE (CPD)**

**APPENDIX B**  
**CONSTRUCTION PRODUCTS DIRECTIVE (CPD)**

Page Break

---

**APPENDIX B: "CONSTRUCTION PRODUCTS DIRECTIVE"**

**The Construction Products Directive (Council Directive 89/106/CE)**

*Council Directive 89/106/EEC of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products.*

Having regard to the Treaty establishing the European Economic Community, and in particular Article 100a thereof,

Having regard to the proposal from the Commission (1),

In cooperation with the European Parliament (2),

Having regard to the opinion of the Economic and Social Committee (3),

Whereas Member States are responsible for ensuring that building and civil engineering works on their territory are designed and executed in a way that does not endanger the safety of persons, domestic animals and property, while respecting other essential requirements in the interests of general well-being;

Whereas Member States have provisions, including requirements, relating not only to building safety, but also to health, durability, energy economy, protection of the environment, aspects of economy, and other aspects important in the public interest;

Whereas these requirements, which are often the subject of national provisions laid down by law, regulation or administrative action, have a direct influence on the nature of construction products employed and are reflected in national product standards, technical approvals and other technical specifications and provisions which, by their disparity, hinder trade within the Community;

Whereas paragraph 71 of the White Paper on completing the internal market, approved by the European Council in June 1985, states that, within the general policy, particular emphasis will be placed on certain sectors, including construction; whereas the removal of technical barriers in the construction field, to the extent that they cannot be removed by mutual recognition of equivalence among all the Member States, should follow the new approach set out in the Council resolution of 7 May 1985 (4) which calls for the definition of essential requirements on safety and other aspects which are important for the general well-being, without reducing the existing and justified levels of protection in the Member States;

Whereas the essential requirements constitute both the general and specific criteria with which construction works must comply; whereas such requirements are to be understood as requiring that the said works conform with an appropriate degree of reliability, With one, some or all of these requirements when and where this is laid down in regulations;

Whereas, as a basis for the harmonized standards or other technical specifications at European level and for the drawing up or granting of European technical approval. Interpretative documents will be established in order to give concrete form to the essential requirements at a technical level;

Whereas these essential requirements provide the basis for the preparation of harmonized standards at European level for construction products; whereas, in order to achieve the greatest possible advantage for a single internal market, to afford access to that market for as many manufacturers as possible, to ensure the greatest possible degree of market transparency and to create the conditions for a harmonized system of general rules in the construction industry, harmonized standards should be established as far as, and as quick as, possible; Whereas these standards are drawn up by private bodies and must remain non-mandatory texts; whereas, for that purpose, the European Committee for Standardization (CEN) and the European Committee for Electro-technical Standardization (Cenelec) are recognized as the competent bodies for the adoption of harmonized standards in accordance with the general guidelines for cooperation between the Commission and those two bodies signed on 13 November 1984; whereas, for the

purposes of this Directive, a harmonized standard is a technical specification (European standard or harmonized document) adopted by, one or both of those bodies upon a mandate given by the Commission in accordance with the provisions of Council Directive 83/189/EEC of 28 March 1983 laying down a procedure for the provision of information in the field of technical standards and regulations (5);

Whereas the special nature of construction products requires the precise formulation of these harmonized standards; whereas it is therefore necessary to draw up interpretative documents in order to establish links between mandates for standards and the essential requirements; whereas harmonized standards, expressed as far as possible in terms of product performance, take account of these interpretative documents, which shall be drawn up in cooperation with the Member States;

Whereas performance levels and requirements to be fulfilled by products in future in the Member States shall be laid down in classes in the interpretative documents and in the harmonized technical specifications in order to take account of different levels of essential requirements for certain works and of different conditions prevailing in the Member States;

Whereas harmonized standards should include classifications that allow construction products which meet the essential requirements and which are produced and used lawfully in accordance with technical traditions warranted by local climatologically and other conditions to continue to be placed on the market;

Whereas a Product is Presumed fit for use if it conforms to a harmonized standard, a European technical approval or a non-harmonized technical specification recognized at Community level; whereas, in cases where products are of little importance with respect to the essential requirements and where they deviate from existing technical specifications, their fitness for use can be certified by recourse to an approved body;

Whereas products thus considered fit for use are easily recognizable by the EC mark; whereas they must be allowed free movement and free use for their intended purpose throughout the Community;

Whereas, in the case of products where European standards cannot be produced or foreseen within a reasonable period of time or of products which deviate substantially from a standard, the fitness for use of such products may be proved by recourse to European technical approvals on the basis of common guidelines; whereas the common guidelines for the granting of European technical approvals will be adopted on the basis of the interpretative documents;

Whereas, in the absence of harmonized standards and European technical approvals, national or other non-harmonized technical specifications may be recognized as providing a suitable basis for a presumption that the essential requirements are met;

Whereas it is necessary to ensure the conformity of products with harmonized standards and with non-harmonized technical specifications recognized at European level by means of procedures of production control by manufacturers and of supervision, testing assessment and certification by independent qualified third parties, or by the manufacturer himself;

Whereas a special procedure should be provided as an interim measure for products where standards or technical approvals recognized at European level do not yet exist; whereas this procedure should facilitate recognition of the results of tests performed in another Member State according to the technical requirements of the Member State of destination;

Whereas a Standing Committee on Construction should be set up comprising experts designated by Member States to assist the Commission on questions arising from the implementation and practical application of this Directive;

Whereas the responsibility of Member States for safety, health and other matters covered by the essential requirements on their territory should be recognized in a safeguard clause providing for appropriate protective measures,

## **HAS ADOPTED THIS DIRECTIVE:**

### **CHAPTER 1: Field of application - Definitions - Requirements -Technical specifications - Free movement of goods**

#### **Article 1**

1. This Directive shall apply to construction products in so far as the essential requirements in respect of construction works under Article 3 (1) relate to them.
2. For the purposes of this Directive, 'construction product' means any product which is produced for incorporation in a permanent manner in construction works, including both buildings and civil engineering works.

'Construction products' are hereinafter referred to as 'products'; construction works including both buildings and civil engineering works are hereinafter referred to as 'Works'.

#### **Article 2**

1. Member States shall take all necessary measures to ensure that the products referred to in Article 1, which are intended for use in works, may be placed on the market only if they are fit for this intended use, that is to say they have such characteristics that the works in which they are to be incorporated, assembled, applied or installed, can, if properly designed and built, satisfy, the essential requirements referred to in Article 3 when and where such works are subject to regulations containing such requirements.
2. (a) When products are subject to other Directives with regard to other aspects and which also provide for the affixing of the CE conformity marking, referred to in Article 4 (2), the latter shall indicate that the products are also presumed to conform to the provisions of those other Directives.  
  
(b) However, where one or more of these Directives allow the manufacturer, during a transitional period, to choose which arrangements to apply, the CE marking shall indicate

conformity only to the Directives applied by the manufacturer. In this case, particulars of the Directives applied, as published in the Official Journal of the European Communities, must be given in the documents, notices or instructions required by the Directives and accompany such products.

3. When a future directive concerns mainly other aspects and only to a minor extent the essential requirements of this Directive, that subsequent directive shall contain provisions ensuring that it also covers the requirements of this Directive.

4. This Directive shall not affect the right of Member States to specify - with due observance of the provisions of the Treaty - the requirements they deem necessary to ensure that workers are protected when using products, provided it does not mean the products are modified in a way unspecified in this Directive.

### Article 3

1. The essential requirements applicable to works which may influence the technical characteristics of a product are set out in terms of objectives in Annex I. One, some or all of these requirements may apply; they shall be satisfied during an economically reasonable working life.

2. In order to take account of possible differences in geographical or climatic conditions or in ways of life as well as different levels of protection that may prevail at national, regional or local level, each essential requirement may give rise to the establishment of classes in the documents referred to in paragraph 3 and the technical specifications referred to in Article 4 for the requirement to be respected.

3. The essential requirements shall be given concrete form in documents (interpretative documents) for the creation of the necessary links between the essential requirements laid down in paragraph 1 and the standardization mandates, mandates for guidelines for European technical approval or the recognition of other technical specifications within the meaning of Articles 4 and 5.

## Article 4

1. Standards and technical approvals shall, for the purposes of this Directive, be referred to as 'technical specifications'.

For the purposes of this Directive, harmonized standards shall be the technical specifications adopted by CEN, Cenelec or both, on mandates given by the Commission in conformity with Directive 83/189/EEC on the basis of an opinion given by the Committee referred to in Article 19 and in accordance with the general provisions concerning cooperation between the Commission and these two bodies signed on 13 November 1984.

2. Member States shall presume that products are fit for use if they enable works in which they are employed, provided the latter are properly designed and built, to satisfy the essential requirements referred to in Article 3 where such products bear the CE marking indicating that they satisfy all the provisions of this Directive, including the conformity assessment procedures laid down in Chapter V and the procedure laid down in Chapter III. The CE marking shall indicate:

(a) that they comply with the relevant national standards transposing the harmonized standards, references to which have been published in the Official journal of the European Communities. Member States shall publish the references of these national standards;

(b) that they comply with a European technical approval, delivered according to the procedure of Chapter III, or

(c) that they comply with the national technical specifications referred to in paragraph 3 in as much as harmonized specifications do not exist; a list of these national specifications shall be drawn up according to the procedure in Article 5 (2).

3. Member States may communicate to the Commission the texts of their national technical specifications which they regard as complying with the essential requirements



referred to in Article 3. The Commission shall forward these national technical specifications forthwith to the other Member States. In accordance with the procedure provided for in Article 5 (2), it shall notify the Member States of those national technical specifications in respect of which there is presumption of conformity with the essential requirements referred to in Article 3.

This procedure will be initiated and managed by the Commission in consultation with the committee referred to in Article 19.

Member States shall publish the references to these technical specifications. The Commission shall also publish them in the Official Journal of the European Communities.

4. Where a manufacturer, or his agent, established in the Community, has not applied, or has applied only in part, the existing technical specifications referred to in paragraph 2, which require, according to the criteria set out in Article 13 (4), the product to be submitted for a declaration of conformity as defined in Annex III (2) (ii), second and third possibilities, the corresponding decisions under Article 13 (4) and Annex III shall apply and such a product's fitness for use within the meaning of Article 2 (1) shall be established in accordance with the procedure set out in Annex III (2) (ii), second possibility..

5. The Commission, in consultation with the committee referred to in Article 19, shall draw up, manage and revise periodically a list of products which play a minor part with respect to health and safety, and in respect of which a declaration of compliance with the 'acknowledged rule of technology', issued by the manufacturer, will authorize such products to be placed on the market.

6. The CE marking signifies that products satisfy the requirements of paragraphs 2 and 4 of this Article. It is for the manufacturer or his authorized representative established within the Community to take responsibility for affixing the CE marking on the product itself, on a label attached to it, on its packaging, or on the accompanying commercial documents.

The model of the CE Marking and conditions of its use are given in Annex III.

Products referred to in paragraph 5 shall not bear the CE Marking.

#### Article 5

1. Where a Member State or the Commission is of the opinion that the harmonized standards or European technical approvals referred to in Article 4 (2), points (a) and (b), or the mandates referred to in Chapter 11, do not satisfy the provisions of Articles 2 and 3, that Member State or the Commission shall notify the committee referred to in Article 19, setting out its reasons. The committee shall deliver an urgent opinion.

In the light of the opinion of the committee, and after consultation with the committee set up under Directive 83/189/EEC where it concerns harmonized standards, the Commission shall inform Member States if the standards or approvals concerned should be withdrawn in the publications referred to in Article 7 (3).

2. On reception of the communication referred to in Article 4 (3), the Commission shall consult the committee referred to in Article 19. In the light of the opinion of the committee, the Commission shall notify Member States whether the technical specification in question should benefit, from the presumption of conformity and, if so, publish a reference to it in the Official Journal of the European Communities.

If the Commission or a Member State believes that a technical specification no longer fulfills the conditions necessary for presumption of conformity with the provisions of Articles 2 and 3, the Commission shall consult the committee referred to in Article 19. In the light of the opinion of the said committee, the Commission shall notify the Member States whether the national technical specification in question should continue to benefit from presumption of conformity, and, if not, whether the reference to it referred to in Article 4 (3) should be withdrawn.

#### Article 6

1 . Member States shall not impede the free movement, placing on the market or use in their territory of products which satisfy the provisions of this Directive.

Member States shall ensure that the use of such products, for the purpose for which they were intended, shall not be impeded by rules or conditions imposed by public bodies or private bodies acting as a public undertaking or acting as a public body on the basis of a monopoly position.

2. Member States shall, however, allow products not covered by Article 4 (2) to be placed on the market in their territory if they satisfy national provisions consistent with the Treaty until the European technical specifications referred to in Chapters II and III provide otherwise. The Commission and the committee referred to in Article 19 will monitor and review the development of the European technical specifications on a regular basis.

3. If the relevant European technical specifications, either themselves or on the basis of the interpretative documents referred to in Article 3 (3), distinguish between different classes corresponding to different performance levels, Member States may determine the performance levels also to be observed in their territory only within the classifications adopted at Community level and only subject to the use of all or some classes or one class.

## **CHAPTER II: Harmonized standards**

### **Article 7**

1. In order to ensure the quality of harmonized standards for products, the standards shall be established by the European standards organizations on the basis of mandates given by the Commission in accordance with the procedure laid down in Directive 83/189/EEC and, after consulting the committee referred to in Article 19, in accordance with the general provisions concerning cooperation between the Commission and these bodies signed on 13 November 1984.

2. The resulting standards shall be expressed as far as practicable in product performance terms, having regard to the interpretative documents.

3. Once the standards have been established by the European standards organizations, the Commission shall publish the references of the standards in the 'C' series of the Official Journal of the European Communities.

### **CHAPTER III: European technical approval**

#### **Article 8**

1 . European technical approval is a favourable technical approval is a favourable technical assessment of the fitness for use of a product for an intended use, based on fulfillment of the essential requirements for building works for which the product is used.

2. European technical approval may be granted to.

(a) products for which there is neither a harmonized standard, nor a recognized national standard, nor a mandate for a harmonized standard, and for which the Commission, after consulting the committee referred to in Article 19, considers that a standard could not, or not yet, be elaborated; and

(b) products which differ significantly from harmonized or recognized national standards.

Even in the case where a mandate for a harmonized standard has been issued, the provisions referred to in (a) do not exclude the granting of European technical approval for products for which guidelines for such approval exist. This shall apply until the entry into force of the harmonized standard in the Member States.

3. In special cases, the Commission may, as a derogation from paragraph 2 (a), authorize the issue of European technical approval, after consulting the committee referred to in Article 19, for products for which there is a mandate for a harmonized standard, or for which the Commission has established that a harmonized standard can be elaborated. The authorization shall be valid for a fixed period.

4. European technical approval shall in general be issued for a five Year period. This period may be extended.

#### Article 9

1. European technical approval for a product shall be based on examinations, tests and an assessment on the basis of the interpretative documents referred to in Article 3 (3) and of the guidelines referred to in Article 11 for this product or the corresponding family of products.

2. Where guidelines referred to in Article 11 do not or not yet exist, European technical approval may be issued by reference to the relevant essential requirements and the interpretative documents where the assessment of the product is adopted by the approval bodies acting jointly in the organization referred to in Annex II. If the approval bodies cannot agree, the matter shall be referred to the committee referred to in Article 19.

3. The European technical approval for a product shall be issued in a Member State in accordance with the procedure laid down in Annex II at the request of the manufacturer or his agent established in the Community.

#### Article 10

1. Each Member State shall notify the other Member States and the Commission of the names and addresses of the bodies which it has authorized to issue European technical approvals.

2. The approval bodies must satisfy the requirements of this Directive and in particular must be able:

- to assess the fitness for use of new products on the basis of scientific and practical knowledge,
- to take impartial decisions in relation to the interests of the manufacturers concerned or their agents, and
- to collate the contributions of all the interested parties in a balanced assessment.

3. The list of approval bodies which are competent to issue European technical approvals, is well as any amendments to that list, shall be published in the 'C' series of the Official Journal of the European Communities.

#### **Article 11**

1. The Commission shall, after consulting the committee referred to in Article 19, issue mandates for establishing guidelines for European technical approval for a product or family of products to the organization of approval bodies designated by the Member States.

2. The guidelines for European technical approval for a product or family of products should contain the following, in particular:

- (a) a list of the relevant interpretative documents referred to, in Article 3 (3);
- (b) specific requirements for the products within the meaning of the essential requirements referred to in Article 3 (1);
- (c) the test procedures;
- (d) method of assessing and judging the results of the tests;
- (e) the inspection and conformity procedures which must correspond to Articles 13, 14 and 15;
- (f) the period of validity of the European technical approval.

3. The guidelines for European technical approval shall, after consultation with the committee referred to in Article 19, be published by the Member States in their official language or languages.

### **CHAPTER IV: Interpretative documents**

#### **Article 12**

1. The Commission shall, after consulting the committee referred to in Article 19, instruct technical committees in which the Member States participate to draw up the interpretative documents referred to in Article 3 (3).

2. The interpretative documents shall:

(a) give concrete form to the essential requirements laid down in Article 3 and in Annex 1 by harmonizing the terminology and the technical bases and indicating classes or levels for each requirement where necessary and where the state of scientific and technical knowledge so permits;

(b) indicate methods of correlating these classes or levels of requirement with the technical specifications referred to in Article 4, for example, methods of calculation and of proof, technical rules for project design, etc.;

(c) serve as a reference for the establishment of harmonized standards and guidelines for European technical approval and for recognition of national technical specifications in accordance with Article 4 (3).

3. The Commission shall publish the interpretative documents in the 'C' series of the Official Journal Of the European Communities after soliciting the opinion of the committee referred to in Article 19.

## **CHAPTER V: Attestation of conformity**

### **Article 13**

1. The manufacturer, or his agent established in the Community, shall be responsible for the attestation that products are in conformity with the requirements of a technical specification within the meaning of Article 4.

2. Products that are the subject of an attestation of conformity shall benefit from the presumption of conformity, with technical specifications within the meaning of Article 4. Conformity shall be established by means of testing or other evidence on the basis of the technical specifications in accordance with Annex III.

3. The attestation of conformity of a product is dependent on:

(a) the manufacturer having a factory production control system to ensure that production conforms with the relevant technical specifications; or

(b) for particular products indicated in the relevant technical specifications, in addition to a factory production control system, an approved certification body being involved in assessment and surveillance of the production control or of the product itself.

4 . The choice of the procedure within the meaning of paragraph 3 for a given product or family of products shall be specified by the Commission. after consultation of the committee referred to in Article 19, according to:

(a) the importance of the part played by the product with respect to the essential requirements, in particular those relating to health and safety .

(b) the nature of the product;

(c) the effect of the variability of the product's characteristics on its serviceability;

(d) the susceptibility to defects in the product manufacture;

in accordance with the particulars set out in Annex III.

in each case, the least onerous possible procedure consistent with safety shall be chosen.

The procedure thus determined shall be indicated in the mandates and in the technical specifications or in the publication thereof.

5. in the case of individual (and non-series) production, a declaration of conformity in accordance with Annex III (2) (ii), third possibility,, shall suffice, unless otherwise provided by the technical specifications for products which have particularly important implications for health and safety.

#### Article 14

1 . In accordance with Annex III, the procedures described shall lead:



(a) in the case of Article 13 (3) (a), to the production of a declaration of conformity. for a product by the manufacturer, or his agent established in the Community; or

(b) in the case of Article 13 (3) (b), to the issue by an approved certification body of a certificate of conformity for a system of production control and surveillance or for the product itself.

Detailed rules for the implementation of the procedures of attestation of conformity, are given in Annex III.

2. The manufacturer's declaration of conformity or the certificate of conformity shall entitle the manufacturer, or his agent established in the Community, to affix the corresponding CE Marking on the product itself, on a label attached to it, on its packaging or on the accompanying commercial documents. The model of the CE Marking and the rules for its use in respect of each of the procedures of attestation of conformity are given in Annex III.

## Article 15

1. Member States shall ensure that the CE Marking is correctly used.

2. Without prejudice to Article 21: (a) where a Member State establishes that the CE marking has been affixed unduly, the manufacturer or his agent established within the Community shall be obliged to make the product conform as regards the provisions concerning the CE marking and to end the infringement under conditions imposed by the Member State; (b) where non-conformity continues, the Member State must take all appropriate measures to restrict or prohibit the placing on the market of the product in question or to ensure that it is withdrawn from the market in accordance with the procedures laid down in Article 21.

3. Member States shall take the measures necessary to prohibit the affixing to products or their packaging of markings which are likely to deceive third parties as to the meaning and form of the CE marking. Any other marking may be affixed to the construction

products on a label fixed to the product packaging or on the accompanying commercial documents provided that the visibility and legibility of the CE marking is not thereby reduced.

## **CHAPTER VI: Special procedures**

### **Article 16**

1. In the absence of technical specifications, as defined in Article 4, for any given product, the Member State of destination shall, on request in individual cases, consider the product to be in conformity, with the national provisions in force if they have satisfied tests and inspections carried out by an approved body in the producing Member State according to the methods in force in the Member State of destination or recognized as equivalent by that Member State.

2. The producing Member State shall inform the Member State of destination, in accordance with whose provisions the tests and inspections are to be carried out, of the body it intends to approve for this purpose. The Member State of destination and the producing Member State shall provide each other with all necessary information. On conclusion of this exchange of information the producing Member State shall approve the body, thus designated. If a Member State has misgivings, it shall substantiate its position and inform the Commission.

3. Member States shall ensure that the designated bodies afford one another all necessary, assistance.

4. Where a Member State establishes that an approved body is not carrying out the tests and inspections properly in conformity with its national provisions, it shall notify the Member State in which the body is approved thereof. That Member State shall inform the notifying Member State within a reasonable time limit of what action has been taken. If the notifying Member State does not consider the action taken to be sufficient, it may prohibit the placing on the market and use of the product in question or make it subject to special conditions. It shall inform the other Member State and the Commission thereof.

## Article 17

Member States of destination shall attach the same value to reports and attestations of conformity issued in the producing Member State in accordance with the procedure referred to in Article 16, as they, do to their own corresponding national documents.

## **CHAPTER VII: Approved bodies**

### Article 18

1. Member States shall notify the Commission and the other Member States of the certification and inspection bodies and the testing laboratories which they have designated for the tasks which must be carried out for the purposes of technical approval, certificates of conformity, inspections and tests, in accordance with this Directive, together with their names and addresses and the identification numbers assigned to them beforehand by the Commission. The Commission shall publish in the Official Journal of the European Communities a list of the notified bodies and laboratories with their identification numbers and the tasks and products for which they have been notified. The Commission shall ensure that this list is kept up to date.

2. Certification bodies, inspection bodies and testing laboratories shall comply with the criteria laid down in Annex IV.

3. Member States shall indicate the products which fall within the competence of the bodies and laboratories referred to in paragraph 1 and the nature of the tasks to be assigned to them.

## **CHAPTER VIII: Standing Committee on Construction**

### Article 19

1. A Standing Committee on Construction is hereby set up.

2. The committee shall be made up of representatives appointed by the Member States. It shall be chaired by a representative of the Commission. Each Member State shall appoint two representatives. The representatives may be accompanied by experts.

3. The committee shall draw up its own rules of procedure.

## Article 20

1. The committee referred to in Article 19 may, at the request of its chair-man or a Member State, examine and question posed by the implementation and the practical application of this Directive.

2. The provisions necessary for:

(a) the establishment of classes of requirements in so far as they are not included in the interpretative documents and the establishment of the procedure for attesting conformity in mandates for standards pursuant to Article 7 (1) and guidelines for approvals pursuant to Article 11 (1);

(b) the giving of instructions for the drawing-up of interpretative documents pursuant to Article 12 (1 ) and decisions on interpretative documents pursuant to Article 12 (3);

(c) the recognition of national technical specifications in accordance with Article 4 (3);

shall be adopted in accordance with the procedure laid down in paragraphs 3 and 4.

3. The representative of the Commission shall submit to the committee a draft of the measures to be taken. The committee shall deliver its opinion on the draft within a time limit which the chairman may lay down according to the urgency of the matter. The opinion shall be delivered by the majority laid down in Article 148 (2) of the Treaty in the case of decisions which the Council is required to adopt on a proposal from the Commission. The votes of the representatives of the Member States within the committee shall be weighted in the manner set out in that Article. The chairman shall not vote.

4. The Commission shall adopt the measures envisaged if they are in accordance with the opinion of the committee.

If the measures envisaged are not in accordance with the opinion of the committee, or if no opinion is delivered, the Commission shall, without delay, submit to the Council a proposal relating to the measures to be taken. The Council shall act by qualified majority.

If, within three months of the proposal being submitted to it, the Council has not acted, the proposed measures shall be adopted by the Commission.

#### **CHAPTER IX: Safeguard clause**

##### **Article 21**

1. Where a Member State ascertains that a product declared to be in conformity with the terms of this Directive does not comply with Articles 2 and 3, it shall take all appropriate measures to withdraw those products from the market, prohibit the placing thereof on the market or restrict free movement thereof.

The Member State concerned shall immediately inform the Commission of any such measure, indicating the reasons for its decision, and in particular whether non-conformity is due to:

- (a) failure to comply with Articles 2 and 3, where the product does not meet the technical specifications referred to in Article 4;
- (b) incorrect application of the technical specifications referred to in Article 4;
- (c) shortcomings in the technical specifications referred to in Article 4 themselves.

2. The Commission shall carry out a consultation of the parties concerned as soon as possible. Where the Commission finds, after this consultation, that the action is justified, it shall immediately so inform the Member State that took the action as well as the other Member States.

3. Where the decision referred to in paragraph 1 is attributed to shortcomings in the standards or technical specifications, the Commission, after consulting the parties concerned, shall bring the matter before the committee referred to in Article 19, as well as the committee set up under Directive 83/189/EEC in the case of shortcomings in a harmonized standard. within two months if the Member State which has taken the measures intends to uphold them and shall start the procedures referred to in Article 5 (2)

4 . The Member State concerned shall take appropriate action against whomsoever made the declaration of conformity and shall inform the Commission and the other Member States thereof.

5 . The Commission shall ensure that the Member States are kept informed of the progress and outcome of this procedure..

## **CHAPTER X: Final provisions**

### **Article 22**

1. Member States shall bring into force the laws, regulations and administrative provisions necessary to comply with the provisions of this Directive within 30 months of its notification (1). They shall forthwith inform the Commission thereof.

(1)This Directive was notified to the Member States on 27 December 1988.

2. Member States shall communicate to the Commission the texts of the provisions of national law which they adopt in the field governed by this Directive.

### **Article 23**

At the latest by 31 December 1993, the Commission, in consultation with the committee referred to in Article 19, shall re-examine the practicability of the procedures laid down by this Directive and, where necessary, submit proposals for appropriate amendments.

## Article 24

This Directive is addressed to the Member States.

Done at Brussels, 21 December 1988.

For the Council

The President

V. PAPANDREOU

### **ANNEX 1: ESSENTIAL REQUIREMENTS**

The products must be suitable for construction works which (as a whole and in their separate parts) are fit for their intended use, account being taken of economy, and in this connection satisfy the following essential requirements where the works are subject to regulations containing such requirements. Such requirements must, subject to normal maintenance, be satisfied for an economically reasonable working life. The requirements generally concern actions which are foreseeable.

#### ***1. Mechanical resistance and stability***

The construction works must be designed and built in such a way that the loadings that are liable to act on it during its constructions and use will not lead to any of the following:

- (a) collapse of the whole or part of the work;
- (b) major deformations to an inadmissible degree;
- (c) damage to other Parts of the works or to fittings or installed equipment as are result of major deformation of the load-bearing construction;
- (d) damage by an event to an extent disproportionate to the original cause

#### ***2. Safety in case of fire***

The construction works must be designed and built in such a way that in the event of an outbreak of fire:

- the load-bearing capacity of the construction can be assumed for a specific period of time,
- the generation and spread of fire and smoke within the works are limited.
- the spread of the fire to neighboring construction works is limited,
- occupants can leave the works or be rescued by other means.
- the safety of rescue teams is taken into consideration.

### ***3. Hygiene, health and the environment***

The construction work, must be designed and built in such a way that it will not be a threat to the hygiene or health of the occupants or neighbors, in particular as a result of any of the following:

- the giving-off of toxic gas,
- the presence of dangerous particles or gases in the air.
- the emission of dangerous radiation
- pollution or poisoning of the water or soil,
- faulty elimination of waste water, smoke, solid or liquid wastes,
- the presence of damp in parts of the works or on surfaces within the works.

### ***4. Safety in use***

The construction work must be designed and built in such a way that it does not present unacceptable risks of accidents in service or in operation such as slipping, falling, collision, burns, electrocution, injury from explosion.

### ***5. Protection against noise***

The construction works must be designed and built in such a way that noise perceived by the occupants or people nearby is kept down to a level that will not threaten their health and will allow them to sleep, rest and work in satisfactory conditions.



## ***6. Energy economy and heat retention***

The construction works and its heating, cooling and ventilation installations must be designed and built in such a way that the amount of energy required in use shall be low, having regard to the climatic conditions of the location and the occupants.

## **ANNEX II: EUROPEAN TECHNICAL APPROVAL**

1. A request for approval may be made by a manufacturer, or his agent established in the Community, only to a single body, authorized for this purpose
2. The approval bodies designated by the Member States form an organization. In the performance of its duties, this organization is obliged to work in close coordination with the Commission which shall consult the committee referred to in Article 19 of the Directive on important matters. Where a Member State has designated more than one approval body, the Member State shall be responsible for coordinating such bodies; it shall also designate the body which shall be spokesman in the organization.
3. The common procedural rules for making the request, the preparation and the granting of approvals are drawn up by the organization comprising the designated approval bodies. The common procedural rules are adopted by the Commission on the basis of the opinion of the committee in accordance with Article 20.
4. In the framework of the organization comprising them, the approval bodies shall afford each other all necessary support. This organization is also responsible for coordination on specific questions of technical approval. If necessary, the organization shall establish sub-groups for this purpose.
5. The European technical approvals are published by the approval bodies, which notify all other approved bodies. At the request of an authorized approval body, a complete set of supporting documents for an approval which has been granted is to be forwarded to the latter for information.

6. The costs arising from the European technical approval procedure shall be paid by the applicant in accordance with national rules.

### **ANNEX III: ATTESTATION OF CONFORMITY WITH TECHNICAL SPECIFICATIONS**

#### ***1. METHODS OF CONTROL OF CONFORMITY***

When the procedures for attestation of conformity of a product with technical specifications pursuant to article 13 are being determined, the following methods of control of conformity shall be used; the choice and combination of methods for any given system shall depend on requirements for the particular product or group of products according to the criteria indicated in Article 13 (3) and (4):

- (a) initial type-testing of the product by the manufacturer or an approved body ;
- (b) testing of samples taken at the factory in accordance with a prescribed test plan by the manufacturer or an approved body;
- (c) audit-testing of samples taken at the factory, on the open market or on a construction site by the manufacturer or an approved body;
- (d) testing of samples from a batch which is ready for delivery, or has been delivered, by the manufacturer or an approved body;
- (e) factory production control; (f) initial inspection of factory and of factory production control by an approved body;
- (g) continuous surveillance, judgment and assessment of factory production control by an approved body.

In the Directive, factory production control means the permanent internal control of production exercised by the manufacturer. All the elements, requirements and provisions adopted by the manufacturer shall be documented in a systematic manner in the form of written policies and procedures. This production control system documentation shall ensure a common understanding of quality assurance and enable the achievement of the required product characteristics and the effective operation of the production control system to be checked.

## **2. SYSTEMS OF CONFORMITY ATTESTATION**

Preference is given to application of the following systems of conformity attestation.

### **(i) Certification of the conformity of the product by an approved certification body on the basis of:**

#### **(a) (tasks for the manufacturer)**

- (1) factory production control;**
- (2) further testing of samples taken at the factory by the manufacturer in accordance with a prescribed test plan;**

#### **(b) (tasks for the approved body)**

- (3) initial type-testing of the product;**
- (4) initial inspection of factory and of factory production control;**
- (5) continuous surveillance, assessment and approval of factory production control;**
- (6) possibly, audit-testing of samples taken at the factory, on the market or on the construction site.**

### **(ii) Declaration of conformity of the product by the manufacturer on the basis of:**

First possibility:

#### **(a) (Tasks for the manufacturer)**

- (1) initial type-testing of the product;**
- (2) factory production control;**
- (3) possibly, testing of samples taken at the factory in accordance with a prescribed test plan;**

#### **(b) (tasks for the approved body)**

- (4) certification of factory production control on the basis of:**

- initial inspection of factory and of factory production control,
- possibly, continuous surveillance, assessment and approval of factory production control.

Second possibility:

- (1) initial type-testing of the product by an approved laboratory ;
- (2) factory production control.

Third possibility:

- (a) initial type-testing by the manufacturer;
- (b) factory production control.

### ***3. BODIES INVOLVED IN THE ATTESTATION OF CONFORMITY***

With respect to the function of the bodies involved in the attestation of conformity, distinction shall be made between

- (i) certification body, which means an impartial body, governmental or non-governmental, possessing the necessary competence and responsibility to carry out conformity certification according to given rules of procedure and management;
- (ii) inspection body, which means an impartial body having the organization, staffing, competence and integrity to perform according to specified criteria functions such as assessing, recommending for acceptance and subsequent audit of manufacturers' quality control operations, and selection and evaluation of products on site or in factories or elsewhere, according to specific criteria;
- (iii) testing laboratory, which means a laboratory which measures, examines ,tests, calibrates or otherwise determines the characteristics or performance of materials or produces.

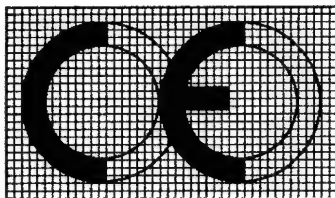
In case (i) and (ii) (first possibility) of paragraph 2, the three functions 3 (i) to (iii) may be performed by one and the same body or by different bodies, in which case the inspection body and /or the testing laboratory involved in the attestation of conformity carries out its function on behalf of the certification body.

For the criteria concerning the competence, impartiality and integrity of certification bodies, inspection bodies and testing laboratories, see Annex 1V.

#### ***4. EC CONFORMITY MARK, EC CERTIFICATE OF CONFORMITY, EC DECLARATION OF CONFORMITY***

##### **4.1. CE conformity marking**

- The CE conformity marking shall consist of the initials "CE " taking the following form:



- If the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected.
- The various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.
- The CE marking shall be followed by the identification number of the body involved in the production control stage.

##### **Additional information**

- The CE marking shall be accompanied by the name or identifying mark of the producer, the last two digits of the year in which the marking was affixed, and where appropriate, the number of the EC certificate of conformity and, where appropriate, indications to identify the characteristics of the product on the basis of the technical specifications.

##### **4.2. EC certificate of conformity**

The EC certificate of conformity shall contain in particular

- name and address of the certification body
- name and address of the manufacturer or his agent established in the Community
- description of the product (type, identification, use...)
- provisions to which the product conforms,
- particular conditions applicable to the use of the product,
- the certificate's number,
- conditions and period of validity of the certificate, where applicable,
- name of, and position held by, the person empowered to sign the certificate.

#### 4.3. EC declaration of conformity

The EC declaration of conformity shall contain in particular:

- name and address of the manufacturer or his agent established in the Community,
- description of the product (type, identification, use ...),
- provision to which the product conforms,
- particular conditions applicable to the use of the product,
- name and address of the approved body, where applicable,
- name of, and position held by, the person empowered to sign the declaration on behalf of - the manufacturer or of his authorized representative.

4.4. The certificate and declaration of conformity shall be presented in the official language or languages of the Member State in which the product is to be used

### **ANNEX IV: APPROVAL OF TESTING LABORATORIES, INSPECTION BODIES AND CERTIFICATION BODIES**

The testing laboratories, the inspection bodies and the certification bodies designated by the Member States must fulfil the following minimum conditions:

1. availability of personnel and of the necessary means and equipment;

2. technical competence and professional integrity of personnel;
  3. impartiality, in carrying out the tests, preparing the reports, issuing the certificates and performing the surveillance provided for in the Directive, of staff and technical personnel in relation to all circles, groups or persons directly or indirectly concerned with construction products;
  4. maintenance of professional secrecy by personnel:
  5. subscription of a civil liability insurance unless that liability is covered by the State under national law
- Fulfillment of the conditions under 1 and 2 shall be verified at intervals by the competent authorities of Member States.

Fulfillment of the conditions under 1 and 2 shall be verified at intervals by the competent authorities of Member States.

## 7. BIBLIOGRAPHY

### 7.1. Books

7.1.1. Dinan, Desmond.1999. Ever Closer Union: An Introduction to European Integration, 2<sup>nd</sup> Ed. Boulder: Lynne Rienner Publishers, Inc.

7.1.2. Nelson, Brent F. and Alexander Stubb.1998. The European Union: Readings on the Theory and Practice of European Integration, 2<sup>nd</sup> Ed.

### 7.2. World Wide Web

7.2.1. "EUROPA" The European Commission:

[http://europa.eu.int/comm/index\\_en.htm](http://europa.eu.int/comm/index_en.htm)

7.2.2. European Union in the United States Website – European Commission Delegation, Washington, DC: <http://www.eurunion.org>

7.2.3. "FIEC 2003" European Construction Industry Federation:

<http://www.fiec.org>

7.2.4. "EIC" European Construction Institute: <http://www.eci-online.org>

7.2.5. EU Construction Consulting Company: <http://www.ecotec.co.uk>

7.2.6. "Connet" Linking European Construction: <http://www.connet.org>

7.2.7. "Search Europe" Search European and Euro Resources:

<http://www.searcheurope.com>

7.2.8. European Council for Construction Research: <http://www.eccredi.org>



- 7.2.9. European Construction Research: <http://www.eurobuild.com>
- 7.2.10. European Construction Consortium: <http://www.ecc.com.pl>
- 7.2.11. "ICE" The Institution of Civil Engineers:  
[http://www.ice.org.uk/navigation/index\\_news.asp?page=../news/press.asp](http://www.ice.org.uk/navigation/index_news.asp?page=../news/press.asp)
- 7.2.12. EU-Supply - Tender Mgmt, Procurement and Supply Chain Services in Construction: <http://www.eu-supply.com>
- 7.2.13. Department of Trade and Industry [Construction Sector Unit - Home Page]: <http://www.dti.gov.uk/construction/help/aboutcd.htm>
- 7.2.14. Continental Construction Enterprises: <http://www.cce-ecv.com>
- 7.2.15. "CEN Europe" The European Committee for Standardization :  
<http://www.cenorm.be/sectors/construction.htm>
- 7.2.16. Is Europe becoming Europe:  
<http://globetrotter.berkeley.edu/Elberg/GartonAsh/ga-elb05.html>
- 7.2.17. Politics of the European Union:  
[http://www.ucis.pitt.edu/cwes/Welcome/Alberta\\_Sbragia/politics\\_of\\_the\\_european\\_union/politics\\_of\\_the\\_european\\_union.html](http://www.ucis.pitt.edu/cwes/Welcome/Alberta_Sbragia/politics_of_the_european_union/politics_of_the_european_union.html)
- 7.2.18. European Community (EC) Association Agreements:  
[http://www.gherson.com/news.php3?article=ec\\_agree](http://www.gherson.com/news.php3?article=ec_agree)
- 7.2.19. European Parliament Fact Sheets (Index):  
[http://www.europarl.eu.int/factsheets/default\\_en.htm](http://www.europarl.eu.int/factsheets/default_en.htm)

7.2.17. Politics of the European Union:

[http://www.ucis.pitt.edu/cwes/Welcome/Alberta\\_Sbragia/politics\\_of\\_the\\_european\\_union/politics\\_of\\_the\\_european\\_union.html](http://www.ucis.pitt.edu/cwes/Welcome/Alberta_Sbragia/politics_of_the_european_union/politics_of_the_european_union.html)

7.2.18. European Community (EC) Association Agreements:

[http://www.gherson.com/news.php3?article=ec\\_agree](http://www.gherson.com/news.php3?article=ec_agree)

7.2.19. European Parliament Fact Sheets (Index):

[http://www.europarl.eu.int/factsheets/default\\_en.htm](http://www.europarl.eu.int/factsheets/default_en.htm)

7.2.20. Euro Coop European Community of Consumer Cooperatives:

<http://www.eurocoop.org/home/en/default.asp>

7.2.21. Euro-Information-Center Ostschweiz (EC money):

<http://www.emb.net/eico>

7.2.22. European global language:

<http://www.hltcentral.org/htmlengine.shtml?id=55>

7.2.23. Central Europe Focus: <http://sunsite.informatik.rwth-aachen.de/EuroFocus>

7.2.24. The European Union On-Line: [http://europa.eu.int/index\\_en.htm](http://europa.eu.int/index_en.htm)

7.2.25. EUROPA - Construction:

<http://www.europa.eu.int/comm/enterprise/construction/index.htm>

7.2.26. Encarta Encyclopedia (European Union) :

<http://encarta.msn.com/encnet/refpages/RefArticle.aspx?refid=761579567>

7.2.27. European Provider of Internet-based Collaboration

softw<http://www.buildonline.com>

## 8. GLOSSARY OF ABBREVIATIONS

8.1.	CEN	The European Committee for Standardization
8.2.	CFSP	Common Foreign and Security Policy
8.3.	CPD	Construction Products Directive
8.4.	EC	European Community <b>European Commission {more common in this text}</b>
8.5.	ECB	European Central Bank
8.6.	ECSC	European Coal and Steel Community
8.7.	ECU	European Currency Unit
8.8.	EEC	European Economic Community
8.9.	EFTA	European Free Trade Agreement
8.10.	EIB	European Investment Bank
8.11.	EIC	European International Contractors
8.12.	EMI	European Monetary Institute
8.13.	EMU	Economic and Monetary Union
8.14.	EU	European Union
8.15.	EUR	Euro
8.16.	FIEC	European Construction Industry Federation
8.17.	GDP	Gross Domestic Product
8.18.	JHA	Justice and Home Affairs
8.19.	NATO	North Atlantic Treaty Organization
8.20.	SEA	Single European Act
8.21.	SME	Small and Medium Enterprises
8.22.	TEN	Trans European Network
8.23.	WTO	World Trade Organization